

ONS

## UNIVERSITY OF CALIFORNIA AT LOS ANGELES



## GIFT OF

Alfred M. Mraitinan 610,17 Coball, Cuxt.

# Infantry Drill Regulations 

 UNITED STATES ARMY
## - <br> 1911

With Corlections to November, 1913


## WASHINGTON

GOVERNMENT PRINTING OFFICE
1914

## İாबinl

WAR DEPARTMENT

Document No. $45 \%$
cffice of the chief of stafg

## ADDITIONAL COPIES

ce this publication may be procured from THE SUPERINTENDENT OF DOCUMENTS
government printing office
WASHINGTON, D. C.
AT

## 35 CENTS PER COPY

## 1913

War Department, Office of the Chief of Staff, I'ashington, November 19, 1913.
The following system of Infantry Drill Regulations, 1911, with corrections to Norember, 1913, including the Manual of the Bayonet, is approved and herewith published for the information and govermment of the Regular Army and the Organized PMilitia of the United States. With a view to insure uniformity thronghout the Army, all infantry drill formations not embraced in this system are prohibited, and those herein prescribed will he strictly observed.

By order of the Secretary of War :
Leonard Wood.
Major Generul, Chief of Staff.

- 11 1 -
I 1
I 18 14 $4 \times 18$ 1.4
 - in




## TABLE OF CONTENTS.

Part I-Drill.
Paragraph.1. Introduction
2. Orders, commands and signals ..... 31- 47
3. School of the soldier ..... 48-100
4. School of the squad ..... 101-158
5. School of the company ..... 159-257
(a) Close order ..... 167-198
(b) Extended order ..... 199-231
(c) Fire
6. The battalion ..... 258-326
(a) Close orter
(b) Combat principles ..... 290-326
7. The regiment ..... 327-346
(a) Close order ..... 333-341
(b) Combat principles ..... $342-346$
8. The brigade ..... $347-349$1-30232-257263-289
Part II-Combut.

1. Introduction350-357
2. Leadership ..... 355-388
(a) General considerations ..... 35S-370
(b) Teanuwork271-377
(c) Orders ..... 378-383
(d) Communication ..... 384-388
3. Combat recomaissance ..... 389-399
4. Fire superiority ..... 400-424
(a) Purpose and nature ..... 400-401
(b) Fire direction and control ..... 402-424
5. Deployment ..... 425-441
6. Attack ..... 442-488
(a) Deployment for attack ..... $449-452$
(b) Advancing the attack ..... $453-457$
(c) The fire attack ..... 458-163
(d) The charge ..... 464-475
(e) Pursuit476-480
(f) Attack of fortificatious ..... 481-484
(g) Holding attack ..... 485-488
7. Defense ..... 489-519
(a) Positions and intrenchments ..... 489-494
(b) Deployment for defense ..... 495-510
(c) Connterattack511-516
(d) Delaying action517-519

## TABLE OF CONTENTS.

Paragraph.
S. Meeting engagements ..... 520-530
9. Withdrawal from action 531-535537-622
(a) Machine guns ..... 537-546
(b) Ammnnition supply ..... 547-553
(c) Mounted scouts ..... 554-557
(d) Night operations ..... 558-568
(e) Infantry against Caralry ..... 569-574
(f) Infantry against Artillery ..... 575-57S
( $g$ ) Artillery supports ..... 579-583
(h) Iutrenchments ..... 584-595
(i) Minor warfare ..... 596-603
(j) Patrols ..... 604-622
Part III-Marches and camps.

1. Marches ..... 623-660
(a) Training and discipline ..... 623-635
(b) Protection of the march ..... 636-660
2. Camps ..... 661-707
(a) Sanitation ..... 661-677
(b) Protection of camp or bi youtc ..... 678-707
Part IV-Ceremonies and inspections.
3. Ceremonies ..... 70S-765
(a) Reviews ..... 711-731
(b) Parades ..... 732-735
(c) Escorts ..... 736-744
4. Inspections ..... 745-754
5. Muster- 755-757
6. Honor's and salutes ..... 758-765
Part Y-Manuals.
7. The color ..... 766-778
8. The band ..... 779-781
9. Manual of the saber ..... 782-791
10. Manual of tent pitching ..... 792--803
11. Manual of the bugle ..... S04-S07
(a) Bugle calls.
(b) Bugle signals.
Appendix A. Mannal of Arms, etc., for Rifle Model 1898. Appendix B. Inspection and shelter tent pitching for troops not equipped with model 1910 shelter tent.
Appendix C. Manual of the Bayonet.

## INFANTRY DRILL REGULATIONS.

UNITED STATES ARMY, 1911.

## DEFINITIONS.

Alignment: A straight line unon which several elements are formed, or are to be formed; or the dressing of several elements upon a straight line.
Base: The element on which a morement is regulated.
Battle sight: The position of the rear sight when the leaf is laid down.
Center: The middle point or element of a command.
Column: A formation in which the elements are placed one behind another.
Deploy: To extend the front. In general to change from column to line, or from close order to extended order.
Depth: The space from head to rear of any formation, including the leading and rear elements. The depth of a man is assumed to be 12 inches.
Distance: Space between elements in the direction of depth. Distance is measured from the back of the man in front to the breast of the man in rear. The distance between ranks is 40 inches in both line and column.
Element: A file, squad, platoon, company, or larger body. forming part of a still larger body.
File: Two men, the front-rank man and the corresponding man of the rear rank. The front-rank man is the file leader. A file which has no rear-rank man is a blank file. The term file applies also to a single man in a single-rank formation.
File closers: Such officers and noncommissioned officers of a company as are posted in rear of the line. For convenience, all men posted in the line of file closers.
Flank: The right or left of a command in line or in column; also the element on the right or left of the line.

Formation: Arrangement of the elements of a command. The placing of all fractions in their order in line, in column, or for battle.
Front: The space, in width, occupied by an element, either in line or in column. The front of a man is assumed to be 22 inches. Front also denotes the direction of the enemy.
Guide: An officer, noncommissioned officer, or private upon whom the command or elements thereof regulates its march.
Head: The leading element of a column.
Interval: Space between elements of the same line. The interval between men in ranks is 4 inches and is measured from elbow to elbow. Between companies, squads, etc., it is measured from the left elbow of the left man or guide of the group on the right, to the right elbow of the right man or guide of the group on the left.
Left: The left extremity or element of a body of troops.
Line: A formation in which the different elements are abreast of each other.
Order, close: The formation in which the units, in double rank, are arranged in line or in column with normal intervals and distances.
Order, extended: The formation in which the units are separated by intervals greater than in close order.
Pace: Thirty inches; the length of the full step in quick time.
Point of rest: The point at which a formation begins. Specifically, the point toward which units are aligned in successive movements.
Rank: A line of men placed side by side.
Right: The right extremity or element of a body of troops.

## Part I.-DRILL.

## INTRODUCTION.

1. Success in battle is the ultimate object of all militars training; success may be looked for only when the training is intelligent and thorough.
2. Commanding officers are accountable for the proper training of their respective organizations within the limits prescribed by regulations and orders.

The excellence of an organization is judged by its field efficiency. The field efficiency of an organization depends primarily upon its effectireness as a whole. Thoroughness and miformity in the training of the mits of an organization are indispensable to the efficiency of the whole; it is by sucb means alone that the requisite teamwork may be developed.
3. Simple movements and elastic formations are essential to correct training for battle.
4. The Drill legulatious are furnished as a guide. They provide the principles for training and for increasing the probability of success in battle.

In the interpretation of the regulations, the spirit must be sought. Quibbling over the minutise of form is indicative of failure to grasp the spirit.
5. The principles of combat are considered in Part II of these regulations. They are treated in the rarions schools included in Part I only to the extent necessary to indicate the functions of the various commanders and the division of responsibility between them. The amplification necessary to a proper understanding of their application is to be sought in Part II.
6. The following important distinctions must be observed:
(a) Drills executed at attention and the ceremonies are disciplinary exercises designed to teach precise and soldierly morement, and to inculcate that prompt and subconscions obedience which is essential to proper military control. To this end,
smartness and precision should be exacted in the execution of every detail. Such drills should be frequent, but short.
(b) The purpose of extended order drill is to teach the mechanism of deployment, of the firings, and, in general, of the employment of troops in combat. Such drills are in the nature of disciplinary exercises and should be frequent, thorough, and exact in order to habituate men to the firm control of their leaders. Extended order drill is executed at ease. The company is the largest unit which executes extended order drill.
(c) Field exercises are for instruction in the duties incident to campaign. Assumed situations are employed. Each exercise should conclude with a discussion, on the ground, of the exercise and principles involved.
(d) The combat exercise, a form of field exercise of the company, battalion, and larger units, consists of the application of tactical principles to assumed situations, employing in the execution the appropriate formations and movements of close and extended order.

Combat exercises must simulate, as far as possible, the battle conditions assumed. In order to familiarize both officers and men with such conditions, companies and battalions will frequently he consolidated to provide war-strength organizations. Officers and noncommissioned officers not required to complete the full quota of the units participating are assigned as observers or umpires.

The firing line can rarely be controlled by the roice alone: thorough training to insure the proper use of prescribed signals is necessary.

The exercise should be followed by a brief drill at attention in order to restore smartness and control.
7. In field exercises the enemy is said to be imaginary when his position and force are merely assumed; outlined when his position and force are indicated by a few men; represented when a body of troop acts as such.

## General Rules for Drills and Formations.

8. When the preparatory command consists of more than one part, its elements are arranged as follows:
(1) For movements to be executed successively by the subdivisions or elements of an organization: ( $u$ ) Description of the movement ; (b) how executed, or on what element executed.
(2) For movements to be executed simultaneously by the subdivisions of an organization: (a) The desiguation of the subdivisions; ( $b$ ) the movement to be executed.
9. Movements that may be executed toward either flank are explained as toward but one flank, it being necessary to substitute the word "left" for "right," and the reverse, to have the explanation of the corresponding movement toward the other flank. The commands are given for the execution of the movements toward either flank. The substitute word of the command is placed within parentheses.
10. Any morement may be executed either from the halt or when marching, unless otherwise prescribed. If at a halt, the command for morements involving marching need not be preiaced by forward, as 1. Column right (left), 2. MARCH.
11. Any movement not specially excepted may be executed in double time.

If at a halt, or if marching in quick time, the command double time precedes the command of execution.
12. In successive morements executed in double time the leading or base unit marches in quick time when not otherwise prescribed; the other units march in double time to their places in the formation ordered and then conform to the gait of the leading or base unit. If marching in double time, the command double time is omitted. The leading or base unit marches in quick time; the other units continue at double time to their places in the formation ordered and then conform to the gait of the leading or base unit.
13. To hasten the execution of a movement begun in quick time, the command: 1. Double time, 2. MARCH, is given. The leading or base unit continues to march in quick time, or remains at halt if already halted; the other units complete the execution of the morement in double time and then conform to the gait of the leading or base unit.
14. To stay the execution of a movement wheu marching, for the correctio:, of errors, the command: 1. In place, 2. HALT, is given. All hait and stand fast, without changing the position of the pieces. To resume the movement the command: $1 . \mathrm{Re}$ sume, 2. MARCH, is given.
15. To revoke a preparatory command, or, being at a halt, to begin anew a morement improperly begun, the command, AS YOU WERE, is given, at which the morement ceases and the former position is resumed.
16. Unless otherwise announced, the guide of a company or subdivision of a company in line is right; of a battalion in line or line of subdivisions or of a deployed line, center; of a rank in columu of squads, toward the side of the guide of the company.

To march with guide other than as prescribed above, or to change the guide: Guide (right, left, or center).

In successive formations into line, the guide is toward the point of rest; in platoons or larger subdivisions it is so announced.

The announcement of the guide, when given in connection with a morement, follows the command of execution for that movement. Exception: 1. As skirmishers, guide right (left or center), 2. MARCH.
17. The turn on the fixed pivot by suldivisions is used in all formations from line into column and the reverse.

The turn on the moving pivot is used by subdivisions of a column in executing changes of direction.
18. Partial changes of direction may be executed:

By interpolating in the preparatory command the word half, as Column half right (left), or Right (left) half turn. A change of direction of $45^{\circ}$ is executed.

Hy the command: INCLINE TO THE RIGHT (LEFT). The guide, or guiding element, moves in the indicated direction and the remainder of the command conforms. This movement effects slight changes of direction.
19. The lesignations line of platoons, line of companies, line of battalions, etc., refer to the formations in which the platoons, companies, battalions, etc., etch in column of squads, are in line.
20. Full distance in column of subdivisions is such that in forming line to the right or left the subdivisions will have their proper intervals.

In columm of subdivisions the guide of the leading subdivision is charged with the step and direction; the guides in rear preserve the trace, step, and distance.

2 1. In close order, all details, detachments, and other bodies of troons are habitually formed in double rank.

To insure uniformity of interval between files when falling in, and in alignments, each man places the palm of the left hand upon the hip, fingers pointing downward. In the first case the
hand is dropped by the side when the next man on the left has his interval; in the second case, at the command front.
$\mathbf{2 2}$. The posts of officers, noncommissioned officers, special units (such as band or machine-gun company), etc., in the various formations of the company, battalion, or regiment, are shown in plates.

In all changes from one formation to another involving a change of post on the part of any of these, posts are promptly taken by the most convenient route as soon as practicable after the command of execution for the movement; officers and noncommissioned officers who have prescribed duties in comnection with the morement ordered, take their new posts when such duties are completed.

As instructors, ollicers and noncommissioned officers go wherever their presence is necessary. As file closers it is their duty to rectify mistakes and insure steadiness and promptness in the ranks.
23. Fxcept at ceremonies, the special units have no fixed places. They take places as directed; in the absence of directions, they conform as nearly as practicable to the plates, and in subseruent movements maintain their relative positions with respect to the flank or end of the command on which they were originally posted.
24. General, tield, and staff officers are habitually mounted. The staff of ath officer forms in single rank 3 paces in rear of bim, the right of the rank extending 1 pace to the right of a point directly in rear of him. Nembers of the staft are arranged in order from right to left as follows: General staff officers, adjutant, aids, other staft officers, arranged in each classitication in order of rauk, the senior on the right. The flag of the general officer and the orderlies are 3 paces in rear of the staff, the flag on the right. When necessary to reduce the front of the staff and orderlies, each line executes twos right or fours right, as explained in the Cilvalry Drill Regulations, and follows the commander.

When not otherwise prestribed, staff officers draw and return saber with their chief.
25. In making the about, an officer, mounted, habitually turns to the left.

When the commander faces to give commands, the staff, flag, and orderlies do not cbange position.
26. When making or receiving official reports, all officers will salute, if covered; if uncovered, they stand at attention.

When under arms, the salute is made with the sword or saber if drawn, otherwise with the hand. A mounted officer dismounts before addressing a superior not mounted.

On meeting, all officers salute when covered; when uncovered, they exchange the courtesies observed between gentlemen.

Military conrtesy requires the junior to salute first, but when the salute is introductory to a report made at a military ceremony or formation, to the representative of a common superior (as for example, to the adjutant, officer of the day, etc.), the officer making the report. whatever his rank, will salute first; the officer to whom the report is made will acknowledge by saluting, if covered, or rerbally, if meovered, that he has received and understood the report.
27. For ceremonies, all mounted enlisted men of a regiment or smaller unit. except those belonging to the machine-gun organizations, are consolidated into a detachment; the senior present commands if no officer is in charge. The detachment is formed as a platoon or squad of cavalry in line or column of fours; noncommissioned staff officers are on the right or in the leading ranks.
28. For ceremonies, such of the noncommissioned staff officers as are dismomed are formed 5 paces in rear of the color, in order of rank from right to left. In colum of squads they march as file closers.
29. Other than for ceremonies, noncommissioned staff officers and orderlies accompany their immediate chiefs unless otherwise directed. If momnted, the noncommissioned staff officers are ordinarily posted on the right or at the head of the orderlies.
30. In all formations and morements a noncommissioned officer commanding a platoon or company carries his piece as the men do, if he is so armed, and takes the same post as an officer in like situation. When the command is formed in line for ceremonies, a noncommissioned oflicer commanding a conpany takes post on the right of the right guide after the conpany has been aligned.

## ORDERS, COMMANDS, AND SIGNALS.

31. Commands only are employed in drill at attention. Otherwise either a command, signal, or order is employed, as best suits the occasion, or one may be used in conjunction with another.
32. Signals should be freely used in instruction, in order that officers and men may readily know them. In making arm signals the saber, rifte, or headdress may be hed in the hand.
33. Officers and men fix their attention at the first word of command, the first note of the bugle or whistle, or the first motion of the signal. A signal includes both the preparatory command and the command of execution; the morement commences as soon as the signal is understood, unless otherwise prescribed.
34. Except in movements executed at attention, commanders or leaders of subdivisions repeat orders, commands, or siguals whenerer such repetition is deemed necessary to insure prompt and correct execution.

Officers, platoon leaders, guides, and musicians are equipped with whistles. Guides and musicians assist by repeating signals when necessary.
35. Prescribed signals are limited to such as are essential as a substitute for the voice under conditions which render the voice inadequate.

Before or during an engagement special signals may be agreed upon to facilitate the solution of such special difficulties as the particular situation is likely to develop, but it must be remembered that simplicity and certainty are indispensable qualities of a signal.

## Orders.

36. In these regulations an order embraces instructions or directions given orally or in writing in terms suited to the particnlar occasion and not prescribed herein.

Orders are employed only when the commands prescribed herein do not sufficiently indicate the will of the commander.

Orders are more fully described in paragraphs 378 to 383 , inclusive.

## Commands.

37. In these regulations a command is the will of the commander expressed in the phraseology prescribed herein.
38. There are two kinds of commands:

The preparatory command, such as forward, indicates the movement that is to be executed.

The command of execution, such as MARCH, HALT, or ARMS, causes the execution.

Preparatory commands are distinguished by italics, those of execution by CAPITALS.

Where it is not mentioned in the text who gives the commands prescribed, they are to be given by the commander of the unit concerned.

The preparatory command should be given at such an interval of time before the command of execution as to admit of being properly understood; the command of execution should be giveu at the instant the movement is to commence.

The toue of command is animated, distinct, and of a loudness proportioned to the number of men for whom it is intended.

Each preparatory command is enunciated distinctly, with a rising infiection at the end, and in such manner that the command of execution may be more energetic.

The command of execution is firm in tone and brief.
39. Majors and commanders of units larger than a battalion repeat such commands of their superiors as are to be executed by their units, facing their mits for that purpose. The battalion is the largest unit that executes a movement at the command of execution of its commander.
40. When giving commands to troops it is usually best to face toward them.

Indifference in giving commands must be avoided as it leads to laxity in execution. Commands should be given with spirit at all times.

## Bugle Signals:

41. The authorized bugle signals are published in Part $Y$ of these regulations.

The following bugle siguals may be used off the battle field. when not likely to convey information to the enemy :

Attention: Troops are brought to attention.

Attention to orders: Troops fix their attention.
Forward, march: Used also to execute quick time from double time.

Double time, march.
To the rear, march: In close order, execute squads right about. Halt.
Assemble, march.
The following bugle signals may be used on the battle field:
Fix bayonets.
Charge.
Assemble, march.
These signals are used only when intended for the entire firing line; hence they can be authorized only by the commander of a unit (for example, a regiment or brigade) which occupies a distinct section of the battle field. Exception: Fix bayonet. (See par. 318.)

The following bugle signals are used in exceptional cases on the battle field. Their principal uses are in field exercises and practice firing.

Commence firing: Officers charged with fire direction and control open fire as soon as practicable. When given to a firing line, the signal is equivalent to fire at will.

Cease firing: All parts of the line execute cease firing at once.
These signals are not used by units smaller than a regiment, except when such unit is independent or detached from its regiment.

## Whistle Signa/s.

42. Attention to orders. A short blast of the whistle. This signal is used on the march or in combat when necessary to fix the attention of troops, or of their commanders or leaders, preparatory to giving commands, orders, or siguals.

When the firing line is firing, each squad leader suspends firing and fixes his attention at a short blast of his platoon leader's whistle. The platoon leader's subsequent commands or signals are repeated and enforced by the squad leader. If a squad leader's attention is attracted by a whistle other than that of his platoon leader, or if there are no orders or commands to convey to his squad he resumes firing at once.

Suspend firing. A long blast of the whistle.

$$
19069^{\circ}-14-2
$$

## Arm Signals.

43. The following arm signals are prescribed. In making signals either arm may be used. Officers who receive signals on the firing line "repeat back" at once to prevent misunderstanding.

Forward, march. Carry the hand to the shoulder; straighten and hold the arm horizontally, thrusting it in direction of march.

This signal is also used to execute quick time from double time.

Ha/t. Carry the hand to the shoulder; thrust the hand upward and hold the arm vertically.

Double time, march. Carry the hand to the shoulder; rapidly thrust the hand upward the full extent of the arm several times.

Squads right, march. Raise the arm laterally until horizontal; carry it to a vertical position above the head and swing it several times between the vertical and horizontal positions.

Squads left, march. Raise the arm laterally until horizontal; carry it downward to the side and swing it several times between the downward and horizontal positions.

Squads right about, march (if in close order') or, To the rear, march (if in skirmish line). Extend the arm vertically above the head; carry it laterally downward to the side and swing it several times between the rertical and downward positions.

Change direction or Column right (left), march. The hand on the side toward which the change of direction is to be made is carried across the body to the opposite shoulder, forearm horizontal; then swing in a horizontal plane, arm extended, pointing in the new direction.

As skirmishers, march. "Raise both arms laterally until horizontal.

As skirmishers, guide center, march. Raise both arms laterally until horizontal; swing both simultaneously upward until vertical and return to the horizontal: repeat several times.

As'skirmishers, guide right (left), march. Raise both arms laterally until horizontal; hold the arm on the side of the guide steadily in the horizontal position; swing the other upward until vertical and return it to the horizontal; repeat several times.

Assemble, march. Raise the arm rertically to its full extent and descrihe horizontal sircles

Range, or Change elevation. To announce range, extend the arm toward the leaders or men for whom the signal is intended, fist closed; by keeping the fist closed battle sight is indicated; by opening and closing the fist, expose thumb and fingers to a number equal to the hundreds of yards; to add 50 yards describe a short horizontal line with forefinger. To change elevation, indicate the amount of increase or decrease by fingers as above; point upward to indicate increase and downward to indicate deerease.

Suspend firing. Raise and hold the forearm steadily in a horlzontal position in front of the forelead, palm of the hand to the front.

Cease firing. Raise the forearm as in suspend firing and swing it up and down sereral times in front of the face.

Platoon. Extend the arm horizontally toward the platoon leader; descrihe small circles with the hand. (See par. 44.)

Squad. Extend the arm horizontally toward the platoon leader; swing the hand up and down from the wrist. (See par. 44.)

Rush. Same as double time.
44. The signals platoon and squad are intended primarily for communiation between the captain and his platoon leaders. The signal platoon or squad indicates that the platoon commander is to cause the signal which follows to be executed by platoon or squad.

## Flag Signals.

4.7. The signal flags described below are carried by the company musicians in the field.

In a regiment in which it is impracticable to make the permanent battalion division alphabetically, the flags of a battalion are as shown: flags are assigned to the companies alphabetically,' within their respective battalions, in the order given below.
First battalion :
Company A. Red field, white square.
Company B. Ked field, blue square.
Company C. Red field, white diagonals.
Company D. Red field, blue diagonals.
Second battalion:
Company E. White field, red square.
Company F. White field, blue square.
Company G. White field, red diagonals.
Company H. Wrhite field, blue diagonals.

## Third battalion :

Company I. Blue field, red square.
Company K. Blue field, white square.
Company L. Blue field, red diagonals.
Company M. Blue field, white diagonals.
46. In addition to their use in risual signaling, these flags serve to mark the assembly point of the company when disorganized by combat, and to mark the location of the company in bivouac aud elsewhere, when such use is desirable.
47. For communication between the firing line and the reserve or commander in rear, the subjoined signals (Signal Corps codes) are prescribed and should be memorized. In transmission, their concealment from the enemy's view should be insured. In the absence of signal flags, the headdress or other substitute may be used.

| Letter of alphabet. | If signaled from the rear to the firing line. | If signaled from the firing line to the rear. |
| :---: | :---: | :---: |
| A A A. | Ammunition going forward. | Ammunition required. |
| C C C.. | Charge (mandatory at all times).. | Ain about to charge if no instruc- |
| C F | Cease firing | tions to the contrary. Cease firing. |
| D T | Double time or "rush" | Donble time or "rush." |
|  | Commenee firing. | Am about to commence firing if no instructions to the contrary. |
| F B | Fix bayonets |  |
| H | Halt | Left. |
| N | Negative | Negative. |
| 0 | Move forward | Am about to move forward. |
| Q | What is the range | What is the range:' |
|  | Range | Range. |
|  | Right | Right. |
| SS | Support going for | Support needed. |
| T | Suspend firing | Suspend firing. |
|  | Target. | Target. |

## SCHOOL OF TIHE SOLDIER.

48. The instructor explains briefly each morement, first executing it himself if practicable. He requires the recruits to take the proper positions unassisted and does not touch them for the purpose of correcting them, except when they are unable to correct themselves. He avoids keeping them too long at the same movement, although each should be understood before passing to auother. He exacts by degrees the desired precision sad uniformity.
49. In order that all may advance as rapidly as their abilities permit, the recruits are grouped according to proticiency as instruction progresses. Those who lack aptitude and quickness are separated from the others and placed under experienced drill masters.

## INSTRUCTION WITHOUT ARMS.

50. For preliminary instruction a number of recruits, usually not exceeding three or four, are formed as a squad in single rank.

## Position of the Soldier, or Attention.

51. Heels on the same line and as near each other as the conformation of the man permits.

Feet turned out equally and forming an angle of about $45^{\circ}$.
Knees straight without stiffness.
Hips level and drawn back slightly; body erect and resting equally on hips; chest lifted and arched; shoulders square and falling equally.

Arms and Lauds hanging maturally, thumb along the seam of the trousers.

Head erect and squarely to the front, chin drawn in so that the axis of the head and neck is vertical; eyes straight to the frout.

Weight of the body resting equally upon the heels and balls of the feet.

The Rests.
52. Being at a halt, the commands are: FALL OUT; REST; AT EASE; and, 1. Parade, ㄹ. REST.

At the command fall out, the men may leave the ranks, but are required to remain in the immediate vicinity. They resume their former places, at attention, at the command fall in.

At the comniand rest each man keeps one foot in place, but is not required to preserve silence or immobility.

At the command at ease each man keeps one foot in place and is required to preserve silence but not immobility.
53. 1. Parade, 2. REST. Carry the right foot 6 inches straight to the rear, left knee slightly bent; clasp the hands, without constraint, in front of the center of the body, fingers joined, left hand uppermost, left thumb clasped by the thumb and forefinger of the right hand; preserve silence and steadiness of position.
54. To resume the attention: 1. Squad, 2.' ATTENTION.

The men take the position of the soldier.

## Eyes Right or Left.

## 55. 1. Eyes, 2. RIGHT (LEFT), 3. FRGNT.

At the command right, turn the head to the right oblique, eyes fixed on the line of eyes of the men in, or supposed to be in, the same rank. At the command front, turn the head and eyes to the front.

## Facings.

56. To the flank: 1. Right (left), 2. FACE.

Raise slightly the left heel and right toe; face to the right, turning on the right heel, assisted by a slight pressure on the ball of the left foot; place the left foot by the side of the right. Left face is executed on the left heel in the corresponding manner.

Right (left) half face is executed similarly, facing $45^{\circ}$.
"To face in marching" and idvance, turn on the ball of either foot and step, off with the other foot in the new line of direction; to face in marching without gaining ground in the new direction, turn on the ball of either foot and mark time.
57. To the rear: 1. About, 2. FACE.

Carry the toe of the right foot about a half foot-length to the rear and slightly to the left of the left heel without changing the position of the left foot; face to the rear, turning to the right on the left heel and right toe; place the right heel by the side of the left.

## Saluto with the Hand.

## 58. 1. Hand, 2. SALUTE.

Raise the right hand smartly till the tip of the forefinger tonches the lower part of the headdress above the right eye, thumb and fingers extended and joined, palm to the left, forearm inclined at about $45^{\circ}$, hand and wrist straight; at the same time look toward the person saluted. (TWO) Drop the arm smartly by the side.

For rules governing salutes, see "Honms and Salutes," pars. 758+605.

## STEPS AND MARCHINGS.

59. All steps and marchings exented from a halt, except right step, begin with the left foot.
60. The length of the full stel in quick time is 30 inches, measured from heel to heel, and the cadence is at the rate of 120 steps per minute.

The length of the full step in double time is 36 inches; the cadence is at the rate of 180 steps per minute.

The instructor, when necessary, indicates the cadence of the step by calling one, two, three, four, or left, right, the instant the left and right foot, respectively, should be planted.
61. All steps and marchings and morements inrolving march are executed in quick time unless the squad be marching in double time, or double time be added to the command; in the latter case double time is added to the prejaratory command. Example: 1. Squad right, double time, 2. MARCH (School of the Squad).

## Quick Time.

62. Being at a halt, to marech forward in quick time: 1. Forward, 2. MARCH.

At the command forward, shift the weight of the body to the right leg, left knee straight.

At the command march, move the left foot smartly straight forward 30 inches from the right, sole near the ground, and plant it without shock; next, in like manner, advance the right
foot and plant it as above; continue the march. The arms swing naturally.
63. Being at a halt, or in march in quick time, to march in double time: 1. Double time, 2. MARCH.

If at a halt, at the first command shift the weight of the body to the right leg. At the command march, raise the forearms, fingers closed, to a horizontal position along the waist line; take up an easy run with the step and cadence of double time, allowing a natural swinging motion to the arms.

If marching in quick time, at the command march, given as either foot strikes the ground, take one step in quick time, and then step off in double time.
64. To resume the quick time: 1. Quick time, 2. MARCH.

At the command march, given as either foot strikes the ground, advance and plant the other foot in double time; resume the quick time, dropping the hands by the sides,

## To Mark Time.

65. Being in march: 1. Mark time, 2. MARCH.

At the command march, given as either foot strikes the ground. adrance and plant the other foot; bring up the foot in rear and continue the cadence by alternately raising each foot about 2 inches and planting it on line with the other.

Being at a halt, at the command march, raise and plant the feet as described above.

## The Half Step.

66. 67. Half step, 2. MARCH.

Take steps of 15 inches in quick time, 18 inches in double time.
67. Forward, half step, halt, and mark time may be executer one from the other in quick or double time.

To resume the full step from half step or mark time: 1. Forward, 2. MARCH.

## Side Step.

68. Being at a halt or mark time: 1. Right (left) step, 2. MARCH.

Carry and plant the right foot 15 inches to the right; bring the left foot beside it and continue the movement in the cadence of゙ quick time.

The side step is used for short distances only and is not executed in double time.

If at order arms, the side step is executed at trail without command.

## Back Step.

69. Being at a halt or mark time: 1. Backward, 2. MARCH.

Take steps of 15 inches straight to the rear.
The back step is used for short distances only and is not executed in double time.

If at order arms, the back step is executed at trail without command.

## To Halt.

70. To arrest the march in quick or double time: 1. Squad, 2. HALT.

At the command halt, given as either foot strikes the ground, plaut the other foot as in marching; raise and place the first foot by the side of the other. If in double time, drop the hands by the sides.

## To March by the Flank.

71. Being in march: 1. By the right (left) flank, 2. MARCH.

At the command march, givel as the right foot strikes the ground, advance and plant the left foot, then face to the right in marching and step off in the uew direction with the right foot

## To March to the Rear.

72. Being in march: 1. To the rear, 2. MARCH.

At the command march, given as the right foot strikes the ground, advance and plant the left foot; turn to the right about on the balls of both feet and immediately step off with the left foot.

If marching in double time, turn to the right about, taking four steps in place, keeping the cadence, and then step off with the left foot.

## Change Step.

## 73. Being in march: 1. Change step, 2. MARCH.

At the command march, given as the right foot strikes the ground, advance and plant the left foot; plant the toe of the right foot near the heel of the left and step off with the left foot.

The change on the right foot is similarly executed, the command march being giveu as the left foot strikes the ground

## MANUAL OF ARMS.

74. As soon as practicable the recruit is taught the use, nomenclature (Pl. I), and care of his rifle; when fair progress has been made in the instruction without arms, he is taught the manual of arms; instruction without arms and that with arms alternate.
75. The following rules govern the carrying of the piece:

First. The piece is not carried with cartridges in either the chamber or the magazine except when specifically ordered. When so loaded, or smpposed to he loaded, it is habitually carried locked; that is, with the safety lock tmined to the "safe." At all other times it is carried unlockend, with the trigger pulled.

Second. Whenerer troops are formed under arms, pieces are immediately inspectel at the commands: 1. Inspection, 2. ARMS; 3. Order (Right shoulder, port), 4. ARMS.

A similar inspection is made immediately before dismissal.
If cartridges are found in the chamber or magazine they are removed and placed in the belt.

Third. The cut-uff is kept turned " off" except when cartridges are actually used.

Fourth. The bayonet is not fixed except in bayonet exercise, ou guard, or for combat.

Fifth. Fall in is executed with the piece at the order arms. Fall out, rest, and at ease are executed as withont arms. On resuming attention the position of order arms is taken.

Sixth. If at the order, unless otherwise prescribed, the piece is bronght to the right shonder at the command march, the three motions corresponding with the first three steps. Movements may be executed at the trail by prefacing the preparatory command with the words at trail; as, 1. At trail, forward. 2. MARCH; the trail is taken at the command march.

When the facings, alignments, open and close ranks; taking interval or distance, and assemblings are executed from the order, raise the piece to the trail while in motion and resume the order on halting.

Seventh. The piece is brought to the order on halting. The execution of the order begins when the halt is completed.

Eighth. A disengaged hand in double time is held as when without arms.

SA

GU

76. The following rules govern the execution of the manual of arms:

First. In all positions of the left hand at the balance (center of gravity, bayonet unfixed) the thumb clasps the piece; the sling is included in the grasp of the hand.

Second. In all positions of the piece "diagonally across the body" the position of the piece, left arm and hand are the same as in port arms.

Third. In resuming: the order from any position in the manual, the motion next to the last concludes with the butt of the piece about 3 inches from the ground, barrel to the rear. the left hand abore and near the right, steadying the piece, fingers extended and joined, forearm and wrist straight and incliuing downward, all fingers of the right hand grasping the piece. To complete the order, lower the piece gently to the ground with the right hand, drop the lelt quickly by the side, and take the position of order arms.

Allowing the piece to drop through the right haud to the ground, or other similar abnse of the rifle to prodnce effect in executing the manual, is prohibited.

Fourth. The cadence of the motions is that of quick time; the recruits are first required to give their whole attention to the details of the motions, the cadence being gradually acquired as they become accustomed to handling their pieces. The instructor may require them to count aloud in cadence with the motions.

Fifth. The manual is taught at a halt and the morements are, for the purpose of instruction, divided into motions and executed in detail; in this case the command of execution determines the prompt execution of the first motion, and the commands, two, three, four, that of the other motions.

To execute the movements in detail, the instructor first cautions: By the numbers; all movements divided into mrotions are then executed as above explained until he cautions: Without the numbers; or commands movements other than those in the manual of arms.

Sixth. Whenever circumstances require, the regular positions of the manual of arms and the firings may be ordered without regard to the previons pasition of the piece.

Under exceptional conditions of weather or fatigue tbe ritle may be carried in any manner directed.
7. Position of order arms standing: The butt rests evenly on the gromd, barrel to the rear, toe of the butt on a line with toe of, and touching, the right shoe, arms and hands hanging naturally, right hand holding the piece between the thumb and fingers.
78. Being at order arms: 1. Present, 2. ARMS.

With the right hand carry the piece in front of the center of the body, barrel to the rear and vertical, grasp it with the left band at the balance, forearm horizontal and resting against the body. (TWO) Grasp the small of the stock with the right hand.
79. Being at order arms: 1. Port, 2. ARMS.

With the right hand raise and throw the piece diagonally across the body, grasp it smartly with hoth hands; the right, palm down, at the small of the stock; the left, palm up, at the balance; barrel np, sloping to the left and crossing opposite the junction of the neck with the left shoulder; risht forearm horizontal; left forearm resting against the body; the piece in a rertical plane parallel to the front.
80. Being at present arms: 1. Port, 2. ARMS.

Carry the piece diagonally across the body and take the position of port arms.
81. Heing at port arms: 1. Present, 2. ARMS.

Carry the piece to a vertical position in front of the center of the body and take the position of present arms.
82. Being at present or port arms: 1. Order, 2. ARMS.

Let go with the right hand; lower and carry the piece to the right with the left hand; regrasp it with the right hand just above the lower band; let go with the left hand, and take the next to the last pasition in coming to the orler. (TWO) Complete the order.

8:3. Being at order arms: 1. Right shoulder, 2. ARMS.
With the right hand raise and throw the piece diagonally across the buly; carry the right hand quickly to the butt, embracing it, the heel between the first two fingers. (TWO) Without changing the grasp of the right hand, place the piece on the right shoukler, barrel up and inclined at an angle of about $45^{\circ}$ from the horizontal, trigger guard in the hollow of the shoulder, right elbow near the side, the piece in a vertical plane perpendicular to the front; carry the left hand, thumb and fingers extended and joined, to the small of the stock, tip of the forefinger touching the cocking piece, wrist straight and elbow down. (THREE) Irop the left hand by the side.
84. Being at right shoulder arms: 1. Order, 2. ARMS.

Press the butt down quickly and throw the piece diagonally across the body, the right hand retaining the grasp of the butt. (TWO), (THREE) Execute order arms as deseribed from port arms.
85. Being at port arms: 1. Right shoulder, 2. ARMS.

Change the right hand to the butt. (TWO), (THREE) As in right shoulder arms from order arms.
86. Being at right shoulder arms: 1. Port, 2. ARMS.

Press the butt down quickly and throw the piece diagonally across the borly, the right hand retaining its grasp of the loutt. (TWO) Change the right hand to the small of thet stock.
87. Being at right shoulder arms: 1. Present, 2. ARMS.

Execute port arms. (THREE) Execute present arms.
88. Being at present armis: 1. Right shoulder, 2. ARMS.

Execute port arms. (TWO), (THREE), (FOUR) Execute right shoulder arms as from port arms.
89. Being at port arms: 1. Left shoulder, 2. ARMS.

Carry the piece with the right hand and place it on the left shonlder, barrel up, trigger guard in the hollow of the shoulder; at the sime time grasp the hutt with the left hand, heel between first and second fingers, thumb and fingers closed on the slock. (TWO) Drop the right hand by the side.

Being at left shoulder arms: 1. Port, 2. ARMS.
Grasp the piece with the right hand at the small of the stock. (TWO) Carry the piece to the right with the right hand, regrasp it with the left, and take the position of port arms.

Left shoulder arms may be ordered directly from the order, right shoulder or present, or the reverse. At ihe command arms execute port arms and continue in cadence to the position ordered.
90. Being at order arms: 1. Parade, 2. REST.

Carry the right foot 6 inches straight to the rear, left knee slightly bent; carry the muzzle in front of the center of the body, barrel to the left : grasp the piece with the left hand just below the stacking swivel, and with the right hand below and against the left.

Reing at parade rest: 1. Squad, 2. ATTENTION.
Resume the order, the left hand quitting the piece opposite the right hip.

## 91. Being at order arms: 1. Trail, 2. ARMS.

Raise the piece, right arm slightly bent, and incline the muzzle forward so that the barrel makes an angle of about $30^{\circ}$ with the vertical.

When it can be done withont danger or inconrenience to others, the piece may be grasped at the balance and the muzzle lowered until the plece is horizontal; a similar position in the left hand may be used.
92. Being at trail arms: 1. Order, 2. ARMS.

Luwer , the piece with the right hand and resnme the order.

## Rifle Salute.

93. Being at right shoulder arms: 1. Rifle, 2. SALUTE.

Carry the left hand smartly to the shatl of the stock, forearim horizontal, palm of hand down, thumb and fingers extended and joined, forefinger tonching end of cocking piece; look toward the person salnted. (TWO) Drop left hand by the side; turn head and eyes to the front.
94. Being at order or trail arms: 1. Rifle, 2. SALUTE. Carry the left hand smartly to the right side, palm of the hand down, thumb and fingers extended and joined, forefinger against piece near the mozzle; look toward the person saluted. (TWO) Drop the left hand by the side; turn the head and eyes to the front.

For rules governing salntes, see "Honors and Salutes" (pars. 758-765).

## The Eajonet.

95. Being at order arms: 1. Fix, 2. BAYONET.

If the bayonet scabbard is carried on the belt: Execute parade rest; grasp the bayonet, with the right hand, back of hand toward the body; draw the bayonet from the scabbard and fix it on the barrel, glancing at the muzle; resume the order.

If the bayonet is carried on the haversack: Draw the bayonet with the left hand and fix it in the most conrenient manner.
96. Being at order arms: 1. Unfix, 2. BAYONET.

If the bayonet scablard is carried on the belt: Execute parade rest ; grasp the handle of the bayonet firmly with the right haud, pressing the spring with the foretinger of the right hand; raise
the bayonet until the handle is about 12 inches above the muzzle of the piece; drop the point to the left, back of the hand toward the body, and, glaucing at the scabbard, return the bayonet, the blade passing between the left arm and the body; regrasp the piece with the right hand ant resume the order.

If the bayonet scabbard is carried on the haversack: Take the bayonet from, the ritle with the left hand and return it to the scabbard in the most convenient manner.

If marching or lying down, the bayonet is fixed and unfixed in the most expeditions and convenient manner and the piece returned to the original position.
wix and mofix bayomet are excented with promptness and regularity but not in cadence.
97. CHARGE BAYONET. Whether executer at halt or in motion, the bayonet is held toward the opponent as in the position of guard in the Manmal for: Bayonet Exercise.

Bxercises for instruction in bigonet rombat are prescribed in the Manual for Bayonet Wxereise:

## The Inspection.

98. Being at order arms: 1. Inspection, 2. ARMS.

At the second command take the position of port arms. (TWO) seize the bolt handle with the thumb and forefinger of the right hand, turn the handle up; draw the bolt back, and glance at the chamber. Having fomb the chamber empty, or having emptied it, raise the head and eyes to the front.
99. Being at inspection arms: 1. Order (Right shoulder, port), 2. ARMS.

At the preparatory command push the bolt forward, turn the haudle down, pull the trigger, and resume port arms. At the command arms, complete the movement ordered.

## To Dismiss the Squad.

100. Being at halt: 1. Inspection, 2. ARMS, 3. Port, 4. ARMS, ๖. DISMISSED.

## SCHOOL OF THE SQUAD.

101. Soldiers are grouped into squads for purposes of instruction, discipline, control, and order.
102. The squad proper consists of a corporal and seven privates.

The movements in the School of the Squad are designed to make the squad a fixed unit and to facilitate the control and movement of the company. If the number of men grouped is more than 3 and less than 12, they are formed as a squad of 4 files, the excess above 8 being posted as file closers. If the number grouped is greater than 11, 2 or more squads are formex and the group is termed a platoon.

For the instruction of recruits, these rules may be modified.
103. The corporal is the squad leader, and when absent is replaced by a designated private. If no private is designated, the senior in length of service acts as leader.

The corporal, when in ranks, is posted as the left man in the front rank of the squad.

When the corporal leaves the ranks to lead his squad, his rear rank man steps into the front rank, and the file remains blank until the corporal returns to his place in ranks, when his rear rank man steps back into the rear rank.
104. In battle officers and sergeants endeavor to preserve the integrity of squads; they designate new leaders to replace those disabled, organize new squads when necessary, and see that every man is placed in a squad.

Men are taught the necessity of remaining with the squad to which they belong and, in case it be broken un or they become separated therefrom, to attach themselves to the nearest squad and platoon leaders, whether these be of their own or of another organization.
105. The squad executes the halt, rests, facings, steps and marchings, and the manual of arms as explained in the School of the Soldier.

## To Form the Squad.

106. To form the squad the instructor places himself 3 paces in front of where the center is to be and commands: FALL IN.

The men assemble at attention, pieces at the order, and are arranged by the corporal in double rank, as nearly as practicable in order of height from right to left, each man dropping his left hand as soon as the man on his left has his interval. The rear rank forms with distance of 40 inches.

The instructor then commands: COUNT OFF.
At this command all except the right file execute eyes right, and beginning on the right, the men in each rank count one, two, three, four; each man turns his head and eyes to the front as be comuts.

Pieces are then inspected.

## Alignments.

107. To align the squad, the base file or files having been established: 1. Right (Left), 2. DRESS, 3. FRONT.

At the command dress all men place the left hand upon the hip (whether dressing to the right or left) ; each man, except the base file, when on or near the new line executes eyes right, and, taking steps of 2 or 3 inches, places himself so that his right arm rests lightly against the arm of the man on his right, and so that his eyes and shoulders are in line with those of the men on his right; the rear rank men cover in file.

The instructor verifies the alignment of both ranks from the right tlank and orders up or back such men as may be in rear, or in advance, of the line; only the men designated move.

At the command front, given when the ranks are aligned, each man turns his head and eyes to the front and drops his left hand by his side.

In the first drills the basis of the aligument is established on, or. parallel to, the front of the squad; afterwards, in oblique directions.

Whenever the position of the base file or files necessitates a considerable movement by the squad, such movement will be executed by marching to the front or oblique, to the tlank or backward, as the case may be, withont other command, and at the trail.
108. 'To preserve the alignment when marching: GUIDE RIGHT (LEFT).

The men preserve their intervals from the side of the ginide, yielding to pressure from that side and resisting pressure from

$$
19069^{\circ}-14--3
$$

the opposite direction; they recover intervals, if lost, by gradually opening out or closing in; they recover alignment by slightly lengthening or shortening the step; the rear-rank men cover their file leaders at 40 inches.

In double rank, the front-rank man on the right, or designated flank, conducts the march; when marching faced to the flank, the leading man of the front rank is the gaide.

## To Take Intervals and Distances.

109. Peing in line at a halt: 1. Take interval, 2. To the right (left), 3. MARCH, 4. Squad, 5. HALT.

At the second command the rear-rank men march backward 4 steps and halt; at the command march all face to the right and the leading man of each rank steps off; the other men step off in succession, each following the preceding man at 4 paces, rear-rank men marching abreast of their inle leaders.

At the command hatt, given when all have their intervals, all halt and face to the front.
110. Being at intervals, to assemble the squad: 1. Assemb/e, to the right (left), 2. MARCH.

The front-rank man on the right stands fast, the rear-rank man on the right closes to 40 inches. The other men face to the right, close by the shortest line, and face to the front.
111. Being in line at a halt and having counted off: 1. Take distance, 2. MARCH, 3. Squad, 4. HALT.

At the command march No. 1 of the front rank moves straight to the front; Nos. 2, 3, and 4 of the front rank and Nos. 1, 2, 3 , and 4 of the rear rank, in the order named, move straight to the front, each stepping off so as to follow the preceding man at 4 paces. The command halt is given when all have their distances.

In case more than one squad is ir line, each squad executes the movement as above. The guide of each rank of numbers is right.
112. Being at distances, to assemble the squad: 1. Assemble, 2. MARCH.

No. 1 of the front rank stands fast; the other numbers move forward to their proper places in line.

## To Stack and Take Arms.

## 113. Being in line at a halt: STACK ARMS.

Each even number of the front rank grasps his piece with the left hand at the upper band and rests the butt between his feet, barrel to the front, muzzle inclined slightly to the front and opposite the center of the interval on his right, the thumb and forefinger raising the stacking swivel; each eren number of the rear rank then passes his piece, barrel to the rear, to his file leader, who grasps it between the bands with his right hand and throws the butt about 2 feet in adrance of that of his own piece and opposite the right of the interval, the right land slipping to the upper band, the thumb and forefinger raising the stacking swivel, which he engages with that of his own piece; each odd number of the front rank raises his piece with the right hand, carries it well forward, barrel to the front; the left hand, guiding the stacking swivel, engages the lower hook of the swivel of his own piece with the free hook of that of the even number of the rear rank; he then turns the barrel outward into the angle formed iny the other two pieces and lowers the butt to the gromud, to the right of and against the toe of his right shoe.

The stacks made, the loose pieces are laid on them by the even numbers of the front rank.

When each man has finished handling pieces, he takes the position of the soldier.

## 114 . Being in line behind the stacks: TAKE ARMS.

The loose pieces are returned by the even numbers of the front rank; each even number of the front rank grasps his own piece with the left hand, the piece of his rear-rank man with his right hand, grasping both between the bands; each odd number of the front rank grasps his piece in the same way with the right hand, disengages it by raising the butt from the ground and then, turning the plece to the riglt, detaches it from the stack; each even number of the front rank disengages and detaches his piece by turning it to the left, and then passes the piece of his rear-rank man to him, and all resume the order.
115. Should any squad have Nos. 2 and 3 blank files, No. 1 rear rank takes the place of No. 2 rear rank in making and breaking the stack; the stacks made or broken, he resumes his post.

Pieces not used in making the stack are termed loose pieces.
Pieces are never stacked with the bayonet fixed.

## The Oblique March.

116. For the instruction of recruits, the squad being in column or correctly aligned, the instructor causes the squad to face half right or half left, points out to the men their relative positions, and explains that these are to be maintained in the oblique march.
117.1. Right (Left) oblique, 2. MARCH.

Each man steps off in a direction $45^{\circ}$ to the right of his original front. He preserves his relative position, keeping his shonlders parallel to those of the guide (the man on the right front of the line or column), and so regulates his steps that the ranks remain parallel to their original front.

At the command halt the men halt faced to the front.
To resume the original drection: 1. Forward, 2. MARCH.
The men half face to the left in marching and then move straight to the front.

If at half step or mark time while obliquing, the oblique march is resmmed by the commands: 1. Oblique, 2. MARCH.

## To Turn on Moving Pivot.

## 118. Being in line: 1. Right (Left) turn, 2. MARCH.

The movement is executed by each rank successively and on the same ground. At the second command, the pivot man of the front rank faces to the right in marching and takes the half step; the other men of the rank oblique to the right until opposite their places in line, then execnte a second right oblique and take the half step on arriving abreast of the pivot man. All glance toward the marching flank while at half step and take the full step without command as the last man arrives on the line.

Right (Left) half turn is executed in a similar manner. The pivot man makes a half change of direction to the right and the other men make quarter changes in obliquing.

## To Turn on Fixed Pivot.

119. Being in line, to turn and march: 1. Squad right (left), 2. MARCH.

At the second command. the right flank man in the front rank faces to the right in marching and marks time; the other front rank men oblique to the right, place themselves abreast of the
pivot, and mark time. In the rear rank the third man from the right, followed in column by the second and first, moves stralght to the front until in rear of his front-rank man, when all face to the right in marching and mark time; the other number of the rear rank moves straight to the front four paces and places himself abreast of the man on his right. Men on the new line glance toward the marching flank while marking time and, as the last man arrives on the line, both ranks execute forward, march, without, command.
120. Being in line, to turn and halt: 1. Squad right (left), 2. MARCH, 3. Squad, 4. HALT.

The third command is given immediately after the second. The turn is executed as prescribed in the preceding paragraph except that all men, on arriving on the new line, mark time until the fourth command is given, when all halt. The fourth command shouk be given as the last man arrives on the line.
121. Being in line, to turn about and march: 1. Squad right (left) about, 2. MARCH.

At the second command, the front rank twice executes squad right, initiating the second squad right when the man on the marching flank has arrived abreast of the rank. In the rear rank the third man from the right, followed by the second and first in column, moves straight to the front until on the prolongation of the line to be occupied by the rear rank; changes direction to the right; mores in the new direction mill in rear of his front-rank man, when all face to the right in marching, mark time, and glance toward the marching flank. The fourth man marches on the left of the third to his new position; as he arrives on the line, both ranks execute forward, march, without command.
122. Being in line, to turn about and halt: 1. Squad right (left) about, 2. MARCH, 3. Squad, 4. HALT.

The third command is given immediately after the second. The turn is executed as prescribed in the preceding paragraph except that all men, on arriving on the new line, mark time until the fourth command is given, when all halt. The fourth command should be given as the last man arrives on the line.

## To Follow the Corporal.

123. Being assembled or deployed, to march the squad withont umecessary commands, the corporal places himself in front of it and commands: FOLLOW ME.

If in line or skirmish line, No. 2 of the front rank follows in the trace of the corporal at about 3 paces; the other men conform to the morements of No. 2, guiding on him and maintaining their relative positions.

If in column, the head of the column follows the corporal.

## To Deploy as Skirmishers.

124. Being in any formation, assembled: 1. As skirmishers, 2. MARCH.

The corporal places himself in front of the squad, if not already there. Moving at a run, the men place themselves abreast of the corporal at half-pace intervals, Nos. 1 and 2 ou his right, Nos. 3 and 4 on his left, rear-rank men on the right of their file leaders, extra men on the left of No. 4; all then conform to the corporal's gait.

When the squad is acting alone, skirmish line is similarly formed on No. 2 of the front rank, who stands fast or continues the march, as the case may be; the corporal places himself in front of the squad when advancing and in rear when halted.

When deployed as skirmishers, the men march at ease, pieces at the trail umless otherwise ordered.

The corporal is the guide when in the line; otherwise No. 2 front rank is the guide.
125. The normal interval between skirmishers is one-half pace, resulting practically in one man per yard of front. The front of a squad thus deployed as skirmishers is about 10 paces.

## To Increase or Diminish Intervals.

126. If assembled, and it is desired to deploy at greater than the normal interval; or if deployed, and it is desired to increase or decrease the interval: 1. As skirmishers, (so many) paces, 2. MARCH.

Intervals are taken at the indicated number of paces. If already deployed, the men move by the flank toward or away from the guide.

The Assembly.
127. Being deployed: 1. Assemble. 2. MARCH.

The men move toward the corporal and form in their proper blaces.

If the corporal continues to advance, the men move in double time, form, and follow him.

The assembly while marching to the rear is not executed.

## Kneeling and Lying Down.

128. If standing: KNEEL.

Half face to the right; carry the cight toe about 1 foot to the left rear of the left heel; kneel on right knee, sitting as nearly as possible on the right heel; left forearm across left thigh; piece remains in position of order arms, right hand grasping it above the lower band.

## 129. If standing or kneeling: LIE DOWN.

Kneel, but with right knee against left heel; carry back the left foot and lie flat on the belly, inclining body about $35^{\circ}$ to the right; piece horizontal, barrel up, muzzle off the ground and pointed to the front; elbows on the ground; left hand at the balance, right hand grasping the small of the stock opposite the neck. This is the position of order arms, lying down.
130. If kneeling or lying down: RISE.

If lineeling, stand up, faced to the front, on the ground marked by the left heel.

If lying down, raise body on both knees; stand up, faced to the front, on the ground marked by the knees.

## 131. If lying down: KNEEL.

Raise the body on both knees; take the position of kneel.
132. In double rank, the positions of kneeling and lying down are ordinarily used only for the better utilization of cover.

When deployed as skirmishers, a sitting position may be taken in lieu of the position kneeling.

## LOADINGS AND FIRINGS.

133. The commands for loading and firing are the same whether standing, kneeling, or lying down. The firings are always executed at a halt.

When kneeling or lying down in donble rauk, the rear rauk does not load, aim, or fire.

The instruction in firing will be preceded by a command for loading.

Loadings are executed in line and skirmish line only.
134. Pieces having been ordered loaded are kept loaded without command until the command unload, or inspection arms, fresh clips being inserted when the magazine is exhausted.
135. The aiming point or target is carefully pointed out. This may be done before or after announcing the sight setting. Both are indicated before giving the command for firing, but may be omitted when the target appears suddenly and is unmistakable; in such case battle sight is used if no sight setting is announced.
136. The target $\mathrm{or}^{*}$ aiming point having been designated and the sight setting announced, such designation or announcement need not be repeated until a change of either or both is necessary.

Troops are trained to continue their fire upon the aiming point or target designated, and at the sight setting amounced, until a change is ordered.
137. If the men are not already in the position of load, that position is taken at the announcement of the sight setting; if the announcement is omitted, the position is taken at the first command for tiring.
138. When deployed, the use of the sling as an aid to accurate firing is discretionary with each man.

## To Load.

139. Being in line or skirmish line at halt: 1. With dummy (blank or ball) cartridges, 2. LOAD.

At the command load each front-rank man or skirmisher faces half right and carries the right foot to the right, about 1 foot, to such position as will insure the greatest firmess and steadiness of the body; raises, or lowers, the piece and drops it into the left hand at the balance, left thumb extended along the stock, muzzle at the height of the breast, and turns the cut-off up. With the right hand he turns and draws the bolt back, takes a loaded clip and inserts the end in the clip slots, places the thumb on the powder space of the top cartridge, the fingers extending around the piece and tips resting on the magazine floor plate; forces the cartridges into the magezine by pressing down with the thmmb; without removing the clip, thrusts the bolt home, turning down the handle; turns the safety lock to the "safe" and carries the hand to the small of the stock. Wach rear rank man moves to the right front, takes a similar position opposite the interval to the right of his front rink man, muzzle of the piece extending beyond the front lank, and loads.

A skimmish line may load while moving, the pieces being held as nearly as practicable in the position of load.

If kneeling or sitting, the position of the piece is similar; if kneeling, the left forearm rests on the left thigh; if sitting the elbows are supported by the knees. If lying down, the left hand steadies and supports the piece at the balance, the toe of the butt resting on the ground, the muzzle off the ground.

For reference, these positions (standing, kneeling, and lying down) are designated as that of load.
140. For instruction in loading: 1. Simulate, 2. LOAD.

Executed as abore described except that the cut-off remains " off " and the handling of cartridges is simulated.

The recruits are first taught to simulate loading and firing; after a few lessons dummy cartridges may be used. Later, blank cartridges may be used.
141. The rifle may be used as a single loader by turning the magazine " off." The magazine may be filled in whole or in part while "off" or " on" by pressing cartridges singly down and back until they are in the proper place. The use of the rifle as a single loader is, however, to be regarded as exceptional.

## To Unload.

## 142. UNLOAD.

Take the pusition of load, turn the safety lock up and more bolt alternately back and forward until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed by first thrusting the boll slightly forward to free it from the stud holding it in place when the chamber is open, pressing the follower down and back to engage it under the bolt and then thrusting the bolt lome; the trigger is pulled. The cartridges are then picked up, cleaned, and retmrned to the belt and the piece is brought to the order.

## To Set the Sight.

143. RANGE, ELEVEN HUNDRED (EIGHT-FIFTY, etc.), or BATTLE SIGHT.

The sight is set at the elevation indicated. The instructor explains and verifies sight settings.

## To Fire by Volley.

## 144. 1. READY, 2. AIM, 3. Squad, 4. FIRE.

At the command ready turn the safety lock to the "ready; " at the command aim raise the piece with both hands and sup-
port the butt firmly against the hollow of the right shoulder, right thumb clasping the stock, barrel horizontal, left elbow well under the piece, right elbow as high as the shoulder; incline the head slightly forward and a little to the right, cheek against the stock, left eye closed, right eye looking through the notch of the rear sight so as to perceive the object aimed at, second joint of forefinger resting lightly against the front of the trigger and taking up the slack; top of front sight is carefully raised into, and held in, the line of sight.

Each rear-rank man aims through the interval to the right of his file leader and leans slightly forward to advance the muzzle of his piece beyond the front rank.

In aiming kneeling, the left elbow rests on the left knee, point of elbow in front of kneecap. In aiming sitting, the elbows are supported by the knees.

In aiming lying down, raise the piece with both hands; rest on both elbows and press the butt firmly against the right shoulder.

At the command fire press the finger against the trigger; fire without deranging the aim and without lowering or turning the piece; lower the plece in the position of Load and load.
145. To continue the firing: 1. AIM, 2. Squad, 3. FIRE.

Each command is executed as previonsly explained. Load (from magazine) is executed by drawing back and thrusting home the bolt with the right hand, leaving the safety lock at the "ready,"

## To Fire at will.

## 146. FIRE AT WILL.

Each man, independently of the others, comes to the ready, aims carefnlly and deliberately at the aiming point or target, fires, loads, and continues the firing until ordered to suspend or cease firing.
147. To increase (decrease) the rate of fire in progress the instructor shouts: FASTER (SLOWER).

Men are trained to fire at the rate of abont three shots per minute at effective ranges and five or six at close ranges, devoting the minimum of time to loading and the maximum to deliberate aiming. To illustrate the necessity for deliberation, and to habituate men to combat conditions, small and comparatively indistinct targets are designated.

## To Fire by Clip.

## 148. CLIP FIRE.

Execnted in the same manner as fire at will, except that each man, after having exhausted the cartridges theu in the piece, suspends firing.

## To Suspend Firing.

149. The instructor blows a long blast of the whistle and repeats same, if necessary, or commands: SUSPEND FIRING.

Firing stops; pieces are held, loaded and locked, in a position of readiness for instant resumption of firing, rear sights unchanged. The men continue to observe the target or aiming point, or the place at which the target disappeared, or at which it is expected to reappear.

This whistle signal may be used as a preliminary to cease firing.

## To Cease Firing.

## 150. CEASE FIRING.

Firing stops; pieces not already there are brought to the position of load; those not loaded, are loaded; sights are laid, pieces are locked and brought to the order.

Cease firing is used for long pauses, to prepare for changes of position, or to steady the men.
151. Commands for suspending or ceasing fire may be given at any time after the preparatory command for firing whether the firing has actually commenced or not.

## THE USE OF COVER.

152. The recruit should be given careful instruction iu the individual use of cover.

It should be impressed upou him that, in taking advantage of natural cover, he must be able to fire easily and effectively upon the enemy; if adrancing on an euemy, he must do so steadily and as rapidly as possible; he must conceal himself as much as possible while firing and while adrancing. While setting his sight he should be under cover or lying prone.
153. To teach him to fire easily and effectively, at the same time concealing himself from the view of the enemy, he is practiced in simulated firing in the prone, sitting, kneeling, and crouching positions, from behind hillocks, trees, heaps of earth or rocks, from depressions, gullies, ditches, doorways, or windows. He is taught to fire around the right side of his concealment whenever possible, or, when this is not possible, to rise enough to fire over the top of his concealment.

When these details are understood, he is required to select cover with reference to an assmmed enemy and to place himself behind it in proper position for firing.
154. The evil of remaining too long in one place, howerer good the concealment, should be explained. He should be taught to advance from cover to cover, selecting cover in advance before leaving his concealment.

It should be impressed uron him that a man rmming rapidly toward an enemy furnishes a poor target. He should be trained in springing from a prone position behind concealment, running at top speed to cover and throwing himself behind it. He should also be practiced in advancing from cover to cover by crawling, or by lying on the left side, rifle grasped in the right hand, and pushing himself forward with the right leg.
155. Me should be tanght that, when fired on while acting independently, he shond drop to the ground, seek cover, and then endeavor to locate his enemy.
156. The instruction of the recrut in the use of cover is continued in the combat exercises of the company, but he must then be taught that the proper advance of the platoon or company and the effectiveness of its fire is of greater importance than the question of cover for individuals. He should also be taught that he may not move about or shift his persition in the firing line except the better to see the target.

## OBSERVATION.

157. The ability to use his eyes accurately is of great importance to the soldice. The recruit should be trained in observing his surrounding from positions and when on the narch.

He should be practiced in pointing out and maming military features of the gromnd: in distingnishing between living beings; in countng distant grouns of objects or beings; in recognizing colors and forms.
158. In the training of men in the mechanism of the firing line, they should be practiced in repeating to one another target and aiming point designations and in quickly locating and pointing out a designated target. They should be tanght to distinguish, from a wone position, distant objects, particularly troops, both with the naked eye and with field glasses. Similarly, they should be trained in estimating distinces.

## SCHOOL OF THE COMPANY.

159. The captain is responsible for the theoretical and practical instruction of his officers and noncommissioned officers, not only in the duties of their respective grades, but in those of the next higher grades.
160. The company in line is formed in double rank with the men arranged, as far as practicable, according to height from right to left, the tallest on the right.

The original division into squads is effected by the command: COUNT OFF. The squads, successively from the right, count off as in the School of the Syuad, corporals placing themselves as Nos, 4 of the front ramk. If the left squad contains less than six men, it is either increased to that number by transfers from other squads or is broken up and its members assigned to other squads and posted in the line of file closers. These squad orgamizations are maintained, by transfers if necessary, until the company becomes so reducerl in numbers as to necessitate a new division into squads. No squad will contain less than six men.
161. The company is further divided into two, three, or four platoons, each consisting of not less than two nor more than four squads. In garrison or ceremonies the strength of platoons may exceed four squads.
$16 \%$. It the formation of the company the platoons or squads are umbered consecutively from right to left and these designations do not change.

For convenience in giving commands and for reference, the designations, right, center, left, when in line, and leading, center, rear, when in column, are applied to platoons or squads. These designations apply to the actual right, left, center, head, or rear, in whatever direction the company may be facing. The center squad is the middle or right middle squad of the company.

The designation "So-and-so's" squad or platoon may also be used.
163. Platoons are assigned to the lieutenants and noncommissioned officers, in order of rank, as follows: 1, right ; 2, left ; 3 , center (right center) ; 4, left center.

LINE ( 14 Sqas. -4 Plats.)


SKIRMISH LINE - HALTED. (16 Squs. - $\angle$ Plats.)


The noncommissioned officers next in rank are assigned as guides, one to each platoon. If sergeants still remain, they are assigned to platoons as additional guides. When the platoon is deployed, its guide, or guides, accompany the platoon leader.

During battle, these assiguments are not changed; vacancies are filled by noncommissioned officers of the platoon, or by the nearest available officers or noucommissioned officers arriving with reenforcing troops.
164. The first sergeant is never assigned as a guide. When not commanding a platoon, he is posted as a file closer opposite the third file from the outer flank of the first platoon; and when the company is deployed he accompanies the captain.

The quartermaster sergeant, when present, is assigned according to his rank as a sergeant.

Enlisted men below the grade of sergeant, armed with the rifle, are in ranks nnless serving as guides; when not so armed, they are posted in the line of file closers.

Musicians, when required to play, are at the head of the column. When the company is deployed, they accompany the captain.
165. The company executes the halt, rests, facings, steps and marchings, manual of arms, loadings and firings, takes intervals and distances and assembles, increases and diminishes intervals, resmmes attention, obliques, resumes the direct march, preserves aliguments, knee/s, lies down, rises, stacks and takes arms, as explained in the Schools of the Soldier and the Squad, substituting in the commands company for squad.

The same rule applies to platoons, detachments, details, etc., substituting their designation for squad in the commands. In the same manner these execute the movements prescribed for the company, whenever possible, substituting their desiguation for company in the commands.
166. A company so depleted as to make division into platoons impracticable is led by the captain as a single platoon, but retains the designation of company. The lieutenants and first sergeant assist in fire control; the other sergeants place tbemselves in the firing line as skirmishers.

## CLOSE ORDER.

## Rules.

167. The gurdes of the right and left, or leading and rear, platoons, are the right and left, or leading and rear, guides, respectively, of the company when it is in line or in column of squads. Other guides are in the line of file closers.

In platoon movements the post of the platoon guide is at the head of the platoon, if the platoon is in column, and on the guiding flank if in line. When a platoon has two guides their original assignment to flanks of the platoon does not change.
168. The guides of a column of squads place themselves on the flank opposite the file closers. To change the guides and file closers to the other flank, the captain commands: 1. File closers on left (right) flank; 2. MARCH. The file closers dirt through the column; the captain and guides change.

In column of squads, each rank preserves the alignment toward the side of the guide.
169. Men in the line of file closers do not execute the loadings or firings.

Guides and enlisted men in the line of file closers execute the manual of arms during the drill umless specially excused, when they remain at the order. During ceremonies they execute all movements.
170. In taking intervals and distances, uuless otherwise directed, the right and left guides, at the first command, place themselves in the line of file closers, and, with them, take a distauce of 4 paces from the rear rank. In taking intervals, at the conmand march, the file closers face to the flank and each steps off with the file nearest him. In assembling the guides and file closers resume their positions in line.
171. In movements executed simultaneously by platoons (as platoons right or platoons, column right), platoon leaders repeat the preparatory command (p/atoon right, etc.), applicable to their respective platoons. The command of execution is given by the captain only.

## To Form the Company.

172. At the sounding of the assembly the first sergeant takes position 6 paces in front of where the center of the company is to be, faces it, draws saber, and commands: FALL IN.

The right guide of the company places himself, facing to the front, where the right of the company is to rest, and at such point that the ceuter of the company will be 6 paces from and opposite the first sergeant; the squads form in their proper places on the left of the right guide, superintended by the other sergeants, who then take their posts.

The first sergeant commands: REPORT. Remaining in position at the order, the squad leaders, in succession from the right, salute and report: All present; or, Private(s) _-absent. The first sergeant does not return the salutes of the squad leaders; he then commands: 1. Inspection, 2. ARMS, 3. Order, 4. ARMS, faces about, salutes the captain, reports: Sir, all present or accounted for, or the names of the unatuthorized absentees, and, without command, takes his post.

If the company can not be formed by squads, the first sergeant commands: 1. Inspection, ¿. ARMS, З. Right shoulder, 4. ARMS, and calls the roll. Wach man, as his name is called, answers here and executes order arms. The sergeant then effects the division into squads and reports the company as prescribed above.

The captain places himself 12 paces in front of the center of. and facing, the company in time to receive the report of the first sergeant, whose salute he returns, and then draws saber.

The lieutenants take their posts when the first sergeant has reported and draw saber with the captain. The company, if not under arms, is formed in like manner omitting reference to arus.
173. For the instruction of platoon leaders and guides, the company, when small, may be formed in single rank. In this formation close order movements only are executed. The single rank executes all morements as explained for the front rank of a company.

## To Dismiss the Company.

174. Being in line at a halt, the captain directs the first sergeant: Dismiss the company. The officers fall ont; the first sergeant places himself faced to the front. 3 paces to the front and 2 paces from the nearest flank of the company, salutes, faces toward opposite flank of the company, and commands: 1 , Inspection, 2. ARMS, 3. Port, 4. ARMS, 5. DISMISSED.

## Alignments.

175. The alignments are executed as prescribed in the School of the Squad, the guide being established instead of $19069^{\circ}-14-4$
the flank file. The rear-rank man of the flank file keeps his head and eyes to the front and covers his file leader.

At each alignment the captain places himself in prolongation of the line, 2 paces from and facing the flank toward which the dress is made, verifies the alignment, and commands: FRONT.

Platoon leaders take a like position when required to rerify alignments.

## Movements on the Fixed Pivot.

176. Being in line, to turn the company: 1. Company right (left), 2. MARCH, 3. Company, 4. HALT; or, 3. Forward, 4. MARCH.

At the second command the right-flank man in the front rank faces to the right in marching and marks time; the other frontrank men oblique to the right, place themselves abreast of the pivot, and mark time; in the rear ramk the third man from the right, followed in column by the second and first, moves straight to the front until in rear of his front-rank man, when ali face to the right in marching and mark time; the remaining men of the rear rank move straight to the front 4 paces, oblique to the right, place themselves abreast of the third man, cover their file leaders, and mark time; the right guide steps back, takes post on the flank, and marks time.

The fourth command is given when the last man is 1 pace in rear of the new line.

The command halt may be given at any time after the movement begins; only those halt who are in the new position. Each of the others halts upon arriving on the line, aligns himself to the right, and executes front without command.
17.7. Being in line, to form column of platoons, or the reverse: 1. Platoons right (left), 2. MARCH, 3. Company, 4. HALT; or, 3. Forward, 4. MARCH:

Executed by each platoon as described for the company.
Before forming line the captain sees that the guides on the flank toward which the movement is to be executed are covering. This is effected by previously announcing the guide to that flank.
178. Being in line, to form column of squads, or the reverse; or, being in line of platoons, to form column of platoons, or the reverse: 1. Squads right (left), 2. MARCH; or, 1. Squads right (left), 2. MARCH, 3. Company, 4. HALT.

Executed by each squad as described in the School of the Squad.

If the company or platoons be formed in line toward the side of the file closers, they dart through the column and take posts in rear of the company at the second command. If the column of squads be formed from line, the file closers take posts on the pivot flank, abreast of and 4 inches from the nearest rank.

## Movements on the Moving Pivot.

179. Being in line, to change direction: 1. Right (Left) turn, 2. MARCH, 3. Forward, 4. MARCH.

Fiecuted as described in the School of the Squad, except that the men do not glance toward the marching flank and that all take the full step at the fourth command. The right guide is the pirot of the front rank. Each rear-rank man obliques on the same gromd as his file leader.
180. Being in column of platoons, to change direction: 1. Column right (left), 2. MARCH.

At the first command the leader of the leading platoon commands: Right turn. At the command march the leading platoon turns to the right ou moving pivot; its leader commands: 1. Forward, 2. MARCH, on completion of the turn. Rear platoons march squarely up to the turning point of the leading platoon and turn at command of their leaders.
181. Being in column of squads, to change direction: 1. Column right (left), 2. MARCH.

At the second command the front rank of the leading squad turns to the right on moring pirot as in the School of the Squad; the other ranks, without command, turn successively on the same ground and in a similar manner.
182. Being in column of squads, to form line of platoons or the reverse: 1. Platoons, column right (left), 2. MARCH.

Executed by each platoon as described for the company.
183. Being in line, to form column of squads and change direction: 1. Squads right (left), column right (left), 2. MARCH; or, 1. Right (Left) by squads, 2. MARCH.

In the first case the right squad initiates the column right as soon as it has completed the squad right.

In the second case, at the command march, the right squad marches forward; the remainder of the company executes squads
right, column left, and follows the right squad. The right guide, when he has posted himself in front of the right squad, takes four short steps, then resumes the full step; the right squad conforms.
184. Being in line, to form line of platoons: 1. Squads right (left), platoons, column right (left), 2. MARCH; or', 1. Platoons, right (left) by squads, 2. MARCH.

Executed by each platoon as described for the company in the preceding paragraph.

Facing or Marching to the Rear.
185. Being in line, line of platoons, or in column of platoons or squads, to face or march to the rear: 1. Squads right (left) about, 2. MARCH; or, 1. Squads right (left) about, 2. MARCH. 3. Company, 4. HALT.

Executed by each squad as described in the School of the Squad.

If the company or platoons be in column of squads, the file closers turn about toward the column, and take their posts; if in liue, each darts throngli the nearest interval between squads.
186. To march to the rear for a few paces: 1. About, 2 . FACE, 3. Forward, 4. MARCH.

If in line, the guides place themselves in the rear rank, now the front rank; the file closers, on facing about, waintain their relative positions. No other movement is executed until the line is faced to the original front.

## On Right (Left) Into Line.

187. Being in column of platoons or squads, to form line on right or left: 1. On right (left) into line, 2. MARCH, 3. Company, 4. HALT, 5. FRONT.

At the first command the leader of the leading unit commands: Right turn. The leaders of the other units command: Forward, if at a halt. At the second command the leading unit turns to the right on moving pivot. The command halt is given when the leading unit has adranced the desired distance in the new direction; it halts; its leader then commands: Right dress.

The units in rear continue to march straight to the front; each, when opposite the right of its place in line, executes right turn at the command of its leader; each is halted on the line
at the command of its leader, who then commands: Right dress. All dress on the first unit in lise.

If executed in double time, the leading squad marches in double time until halted.

Front Into Line.
188. Being in column of platoons or squads, to form line to the front: 1. Right (Left) front into line, 2. MARCH, 3. Company, 4. HALT, 5. FRONT.

At the first command the leaders of the units in rear of the leading one command: Right oblique. If at a halt, the leader of the leading unit commands: Forward. At the second command the leading unit moves straight forward; the rear mits oblique as indicated. The command ha/t is given when the leading unit has advanced the desired distance; it halts; its leader then commands: Left dress. Each of the rear units, when opposite its place in line, resumes the original direction at the command of its leader; each is halted on the line at the command of its leader, who then commands: Left dress. All dress on the first unit in line.
189. Being in column of squads to form column of platoons, or being in line of platoons, to form the company in line: 1. Platoons, right (left) front into line, 2. MARCH, 3. Company, 4. HALT, 5. FRONT.

Executed by each platoon as described for the company. In forming the company in line, the dress is on the left squad of the left platoon. If forming column of platoons, platoon leaders verify the alignment before taking their posts; the captain commands front when the alignments have been verified.

When front into line is executed in double time the commands for halting and aligning are omitted and the guide is toward the side of the first unit in line.

## AT EASE AND ROUTE STEP.

190. The column of squads is the habitual column of route, but route step and at ease are applicable to any marching formation.
191. 'To march at ronte step: 1. Route step, 2. MARCH. Sabers are carried at will or in the scabbard; the men carry their pieces at will, keeping the muzzles elevated; they are not required to preserve silence, nor to keep the step. The rauks corer and preserve their distance. If hillted from route step, the men stand at rest.
192. To march at ease: 1. At ease, 2. MARCH.

The company marches as in route step, except that silence is preserved; when halted, the men remain at ease.
193. Marching at route step or at ease: 1. Company, 2. ATTENTION.

At the command attention the pieces are brought to the right shoulder and the cadenced step in quick time is resumed.

## TO DIMINISH THE FRONT OF A COLUMN OF SQUADS.

194. Being in column of squads: 1. Right (Left) by twos, 2. MARCH.

At the command march all files except the two right files of the leading squad execute in place halt; the two left files of the leading squad oblique to the right when disengaged and follow the right files at the shortest practicable distance. The remaining squads follow successively in like manner.
195. Being in column of squads or twos: 1. Right (Left) by file, 2. MARCH.

At the command march, all files execute in p/ace halt except the right file of the leading two or squad. The left file or files of the leading two or squad oblique successively to the right when disengaged and each follows the file on its right at the shortest practicable distance. The remaining twos or squads follow successively in like manner.
196. Being in column of files or twos, to form column of squads; or, being in column of files, to form columu of twos: 1. Squads (Twos), right (left) front into line, 2. MARCH.

At the command march, the leading file or files halt. The remainder of the squad, or two, obliques to the right and halts on line with the leading file or files. The remaining squads or twos close up and successively form in rear of the first in like manner.

The movement described in this paragraph will be ordered right or left, so as to restore the files to their normal relative positions in the two or squad.
197. The movements prescribed in the three preceding paragraphs are difficult of execution at attention and have no value as disciplinary exercises.
198. Marching by twos or files can not be executed without serious delay and waste of road space. Erery reasonable precaution will be taken to obviate the necessity for these formations.

## EXTENDED ORDER.

## Rules for Deployment.

199. The command guide right (left or center) indicates the base squad for the deployment; if in line it designates the actual right (left or center) squad; if in column the command guide right (left) designates the leading squad, and the command guide center designates the center squad. After the deployment is completed, the guide is center without command, unless otherwise ordered.
200. At the preparatory command for forming skirmish line, from either column of squads or line, each squad leader (except the leader of the base squad, when his squad does not advance), cantions his squad, follow me or by the right (left) flank, as the case may be; at the command march, he steps in front of his squad and leads it to its place in line.
201. Having given the command for forming skirmish line, the captaia, it necessary, indicates to the corporal of the base squad the point on which the squad is to march; the corporal habitually looks to the captain for such directions.
202. The base squad is deployed as soon as it has sufficient interval. The other squads are deployed as they arrive on the general line; each corporal halts in his place in line and commands or signals, as skirmishers; the squad deploys and halts abreast of him.

If tactical considerations demand it, the squad is deployed before arriving on the line.
$\mathbf{2 0 3}$. Deployed lines preserve a general alignment toward the guide. Within their respective fronts, individuals or units march so as best to secure cover or to facilitate the advance, but the general and orderly progress of the whole is paramount.

On halting, a deployed line faces to the front (direction of the enemy) in all cases and takes advantage of cover, the men lying down if necessary.
204. The company in skirmish line advances, halts, moves by the flank, or to the rear, obliques, resumes the direct march, passes from quick to double time and the reverse by the same commands and in a similar manner as in cloge order; if at a halt, the movement by the flank or to the rear is executed by the same commands as when marching. Company right (left, half right,
half left) is executed as explained for the front rank, skirmish interrals being maintained.
205. A platoon or other part of the company is deployed and marched in the same manner as the company, substituting in the commands, platoon (detachment, etc.) for company.

## Deployments.

206. Being in line, to form skirmish line to the front: 1. As skirmishers, guide right (left or center), 2. MARCH.

If marching, the corporal of the base squad moves straigbt to the front; when that squad has advanced the desired distance, the captain commands: 1. Company, 2. HALT. If the guide be right (left), the other corporals move to the left (right) front. and, in succession from the base, place their squads on the line: if the guide be center, the other corporals move to the right or left front, according as they are on the right or left of the center squad, and in succession from the center squad place their squads on the line.

If at a halt, the base squad is deployed without advancing; the other squads may be conducted to their proper places by the flank; interior squads may be moved when squads more distant from the base have gained comfortable marching distance.
207. Being in column of squads, to form skirmish line to the front: 1. As skirmishers, guide right (left or center), 2. MARCH.

If marching, the corporal of the base squad deploys it and moves straight to the front; if at a halt, he deplors his squad without advancing. If the guide be right (left), the other corporals move to the left (right) front, and, in successiou from the base, place their squads on the line; if the guide be center, the corporals in front of the ceuter squad move to the right (if at a halt, to the right rear), the corporals in rear of the center squad move to the left front, and each, in succession from the base, places his squad on the line.

The column of twos or files is deployed by the same commands and in like manner.
208. The company in line or in column of squads may be deployed in an oblique direction by the same commands. The captain points out the desired direction; the corporal of the base squar noves in the direction indicated; the other corporals conform.
209. To form skirmish line to the flank or rear the line or the column of squads is turned by squads to the flank or rear and then deployed as described.
210. The intervals between men are increased or decreased as described in the School of the Squad, adding to the preparatory command, guide right (left or center) if necessary.

## The Assembly.

211. The captain takes his post in front of, or designates, the elcment on which the company is to assemble and commands: 1. Assemble, 2. MARCH.

If in skirmish line the men move promptly toward the designated point and the company is re-formed in line. If assembled by platoons, these are conducted to the designated point by platoon leaders, and the company is re-formed in line.

Platoons may be assembled by the command. 1. Platoons, assemble, 2. MARCH.

Executed by each platoon as described for the company.
One or more platoons may be assembled by the command: 1. Such platoon(s), assemble, 2. MARCH.

Executed by the designated platoon or platoons as described for the company.

## The Advance.

212. The advance of a company into an engagement (whether for attack or defense) is conducted in close order. preferably column of squads, until the probability of encountering hostile fire makes it advisable to deploy. After deployment, and liefore opening firc, the adrance of the company may be contimed in skirmish line or other suitable formation, depending upon circumstances. The advance may often be facilitated, or better adrantage taken of cover, or losses reduced hy the employment of the platoon or squad columns or by the use of a succession of thin lines. The selection of the method to be used is made by the captain or major, the choice depending upon conditions arising during the progress of the advance. If the deployment is found to be premature, it will generally be best to assemble the company and proceed in close order.

Patrols are used to provide the necessary security against surprise.
213. Being in skirmish line: 1. P/atoon columns, 2. MARCH.

The platoon leaders move forward through the center of their respective platoons; men to the right of the platoon leader march to the left and follow him in file; those to the left march in like manner to the right; each platoon leader thus conducts the march of his platoon in double column of files; platoon guides follow in rear of their respective platoons to insure prompt and orderly execution of the advance.
214. Being in skirmish line: 1. Squad columns, 2. MARCH.

Each squad leader mores to the front; the members of each squad oblique toward and follow their squad leader in single file at easy marching distances.
$\mathbf{2 1 5}$. Platoon columns are profitably used where the gromud is so difficult or cover so limited as to make it desirable to take advantage of the few favorable routes; no two platoons should march within the area of burst of a single shrapnel. ${ }^{1}$ Squad columns are of value principally in facilitating the advance orei. rough or brush-grown ground ; they afford no material advantage in securing cover.
216. To deploy platoon or squad columns: 1. As skirmishers, 2. MARCH.

Skirmishers move to the right or left front and successively place themselves in their original positions on the line.
217. Being in platoon or squad columns: 1. Assemble, 2. MARCH.

The platoon or squad leaders signal assemb/e. The men of each platoon or squad, as the case may be, advance and, moving to the right and left, take their proper places in line, each unit assembling on the leading element of the column and re-forming in line. The platoon or squad leaders conduct their units toward the element or point indicated by the captain, and to their places in line; the company is re-formed in line.
218. Being in skirmish line, to adrance by a succession of thin lines: 1. (Such numbers), forward, 2. MARCH.

The captain points out in advance the selected position in front of the line occupied. The designated number of each squad moves to the front; the line thus formed preserres the original intervals as nearly as practicable; when this line has adranced a suitable distance (generally from 100 to 250 yards,

[^0]depending upon the terrain and the character of the hostile fire), a second is sent forward by similar commands, and so on at irregular distances until the whole line has advanced. Upon arriving at the indicated position, the first line is halted. Successive lines, upon arriving, halt on line with the first and the men take their proper places in the skirmish line.

Ordinarily each line is made up of one man per squad and the men of a squad are sent forward in order from right to left as deployed. The first line is led by the platoon leader of the right platoon, the second by the guide of the right platoon, and so on in order from right to left.

The adrance is conducted in quick time unless conditions demand a faster gait.

The company having arrived at the indicated position, a further advance by the same means may be advisable.
219. The adrance in a succession of thin lines is used to cross a wide stretch swept, or likely to be swept, by artillery fire or heary, long-range rifle fire which can not profitably be returned. Its purpose is the building up of a strong skirmish line preparatory to engaging in a fire fight. This method of advancing results in serious (though temporary) loss of control orer the company. Its adrantage lies in the fact that it offers a less definite target, hence is less likely to draw fire.
220. The above are suggestions. Other and better formations may be devised to fit particular cases. The best formation is the one which advances the line farthest with the least loss of men, time, and control.

## The Fire Attack.

221. The principles governing the advance of the firing line in attack are considered in the School of the Battalion.

When it becomes impracticable for the company to advance as a whole by ordinary means, it adrances by rushes.
222. Being in skirmish line: 1. By platoon (two platoons, squad, four men, ctc.), from the right (left), 2. RUSH.

The platoon leader on the indicated flank carefully arranges the details for a prompt and vigorous execution of the rush and puts it into effect as soon as practicable. If necessary, he designates the leader for the indicated fraction. When about to rush, he causes the men of the fraction to cease firing and to hold themselves flat, but in readiness to spring forward in-
stantly. The leader of the rush (at the signal of the platoon leader, if the latter be not the leader of the rush) commands: Follow me, and, runuing at top speed, leads the fraction to the new line, where he halts it and causes it to open fire. The leader of the rush selects the new line if it has not been prerionsly designated.

The first fraction having established itself on the new line, the next like fraction is sent forward by its platoon leader, without further command of the captain, and so on, successively, until the entire company is on the liue established by the first rush.

If more than one platoon is to join in one rush, the junior platoon leader conforms to the action of the senior.
A part of the line having advanced, the captain may increase or decrease the size of the fractions to complete the movement.
223. When the company forms a part of the firing line, the rush of the company as a whole is conducted by the captain, as described for a platoon in the preceding paragraph. The captain leads the rush; platoon leaders lead their respective platoons; platoon guides follow the line to iusure prompt and orderly execution of the advance.
224. When the foregoing method of rushing, by running, becomes impracticable, any method of advance that brings the attack closer to the enemy, such as crawling, should be employed.

For regulations governing the charge, see jaragraphs 318 and 319 .

## The Company in Support.

225. To enable it to follow or reach the firing line, the support adopts suitable formations, following the principles explained in paragraphs $212-218$.

The support should be kept assembled as long as practicable. If after deploying a favorable opportunity arises to hold it for some time in close formation, it should be reassembled. It is redeployed when necessary.
226. The movements of the support as a whole and the dispatch of reenforcements from it to the firing line are coutrolled by the major.

A reenforcement of less than one platoon has little influence and will be avoided whenever practicable.

The captain of a company in support is constantly on the alert fur the major's signals or commands.

22\%. A reenforcement sent to the firing line joins it deployed as skirmishers. The leader of the reenforcement places it in an interval in the line, if one exists, and commands it thereafter as a muit. If no such suitable interval exists, the reenforcement is advanced with increased intervals between skirmishers; each man occupies the nearest interval in the firing line, and each then obeys the orders of the nearest squad leader and platoon leader.
228. A reeuforcement joins the firing line as quickly as possible without exhansting the men.
229. The original platoon division of the companies in the firing line should be maintained and should not be broken up by the mingling of reenforcements.

Upon joining the firing line, otlicers and sergeants accompanying it reenforcement take over the duties of others of like grade whu have been disabled, or distribute themselves so as best to exercise their normal functions. Conditions will vary and no rules can be prescribed. It is essential that all assist in mastering the increasing difficulties of control.

## The Company Acting Alone.

230. In general, the company, when acting alone, is employed according to the principles applicable to the battalion acting alone; the captain employs platoons as the major employs companies, making due allowance for the difference in strength.

The support may be smaller in proportion or may be dispensed with.
231. The company must be well protected against surprise. Combat patrols on the tlamks are specially important. Each leader of a tlank phatoon details a man to watch for the signals of the patrol or patrols ou his flank.

## FIRE.

232. Ordinarily pieces are loaded and extra ammmition is issued before the commany deploys for combat.

In close order the company executes the firings at the command of the captain, who pusts himself in rear of the center of the company.

Usually the frings in close order consist of saluting volleys ouly.
233. When the company is deployed, the men execute the firings at the command of their platoon leaders; the latter give such commands as are necessary to carry out the captain's directions, and, from time to time, add such further commands as are necessary to continue, correct, and control the fire ordered.
234. The voice is generally inadequate for giving commands during fire and must be replaced by signals of such character that proper fire direction and control is assured. To attract attention, signals must usually be preceded by the whistle signal (short blast). A fraction of the firing line about to rush should, if practicable, avoid using the long blast signal as an aid to cease firing. Officers and men behind the firing line can not ordinarily move freely along the line, but must depend on mutual watchfulness and the proper use of the prescribed signals. All should post themselves so as to see their immediate superiors and subordinates.
235. The musicians assist the captain by observing the enemy, the target, and the fire effect, by transmitting commands or signals, and by watching for signals.
236. Firing with blank cartridges at an out/ined or represented enemy at distances less than 100 yards is prohibited.
237. The effect of fire and the influence of the ground in relation thereto, and the individual and collective instruction in marksmauship, are treated in the Small-Arms Firing Manual.

## Ranges.

238. For convenience of reference ranges are classified as follows:

0 to 600 yards, close range.
600 to 1,200 yards, effectire range.
1,200 to 2,000 yards, long range.
2,000 yards and over, distant range.
239. The distance to the target must be determined as accurately as possible and the sights set accordingly. Aside from training and morale, this is the most important single factor in securing effective fire at the longer ranges.
240. Except in a deliberately prepared defensive position, the most accurate and only practicable method of determining the range will generally be to take the mean of several estimates.

Five or six olficers or men, selected from the most accurate estimators in the company, are designated as range finders and are specially trained in estimating distances.

Whenever necessary and practicable, the captain assembles the range finders, points out the target to them, and adopts the mean of their estimates. The range finders then take their cusomary posts.

## Classes of Firing.

841. Volley firing has limited application. In defense it may be used in the early stages of the action if the enemy presents a large, compact target. It may be used by troops executing fire of position. When the ground near the target is such that the strike of bullets can be seen from the firing line, ranging volleys may be used to correct the sight setting.

In combat, volley firing is executed habitually by platoon.
242. Fire at will is the class of hire normally employed in attack or defense.

24:3. Clip fire has limited application. It is principally used: 1. In the early stages of combat, to steady the men by habituating them to brief pauses in firing. 2. To produce a short burst of fire.

## The Target.

244. Ordinarily the major will assign to the company an objective in attack or sector in defense; the company's target will lie within the limits so assigned. In the choice of target, tactical considerations are paramount; the nearest hostile troops within the objective or sector will thus be the usual target. This will ordinarily be the hostile firing line; troops in rear are ordinarily proper targets for artillery, machine guns, or, at times, infantry empleying fire of position.

Change of target should not be made without excellent reasons therefor, such as the sudden appearance of hostile troops under conditions which make them more to be feared than the troops comprising the former target.
$\mathbf{2 4 5}$. The distribution of fire over the entire target is of special importance.

The captain allots a part of the target to each platoon, or each platoon leader takes as his target that part which corresponds to his position in the company. Men are so instructed
that each fires on that part of the target which is directly opposite him.
$\mathbf{2 4 6}$. All parts of the target are equally important. Care must be exercised that the men do not slight its less visible parts. A section of the target not covered by fire represents a number of the enemy permitted to fire coolly and effectively.
247. If the target can not be seen with the naked eye, platoon leaders select an object in front of or behind it, designate this as the aiming point, and direct a sight setting which will carry the cone of fire into the target.

## Fire Direction.

248. When the company is large enough to be divided into platoons, it is impracticable for the captain to command it directly in combat. His efficiency in managing the firing line is measured by his ability to enforce his will through the platoon leaders. Having indicated clearly what he desires them to do, he avoids interfering except to correct serious errors or omissions.
249. The captain directs the fire of the company or of designated platoons. He designates the target, and, when practicable, allots a part of the target to each platoon. Before beginning the fire action he determines the range, announces the sight setting, and indicates the class of fire to be employed and the time to open fire. Thereafter, he observes the tire effect, corrects material errors in sight setting, prevents exhaustion of the ammunition supply, and causes the distribution of such extra ammunition as may be received from the rear.

## Fire Control.

250. In combat the plaioon is the fire unit. From 20 to 35 rifles are as many as one leader can control effectively.
251. Each platoon leader puts into execution the commands or directions of the captain, having first taken such precautions to insure correct sight setting and clear description of the target or aiming point as the situation permits or requires; thereafter, he gives such additional commands or directions as are necessary to exact compliance with the captain's will. He corrects the sight setting when necessary. He designates an alming point when the target can not be seen with the naked eye.
252. In general, platoon leaders observe the target ant the effect of their fire and are on the alert for the captain's commands or signals; they observe and regulate the rate of fire The platoon guides watch the firing line and check every breach of fire discipline. Squad leaders tramsmit commands and signals when necessary, observe the conduct of their squads and abate excitement, assist in enforcing fire discipliue and participate in the firing.
253. The best troops are those that submit longest to fire control. Loss of control is an evil which robs success of its greatest results. To aroid or delay such loss should be the constant aill of all.

Fire control implies the ability to stop firing, change the sight setting and target, and resume a well directed fire.

## Fire Discipline.

254. "Fire discipline implies, besides a hahit of obedience, a control of the rifle by the soldier, the result of training, which will enable him in action to make hits instead of misses. It embraces taking advantage of the grome; care in setting the sight and delivery of fire; constant attention to the orders of the leaders, and careful observation of the encmy ; an increase of fire when the target is favorable, and a cessation of fire when the enemy disappears; economy of ammunition." (Small-Arms Firing Manual.)

In combat, shots which graze the enemy's trench or position and thus reduce the effectiveness of his fire have the approximate value of hits; such shots only, or actual hits, contribute toward fire superiority.

Fire discipline implies that, in a firing line without leaders, each man retains his presence of mind and directs effective fire upon the proper target.
255. To create a correct appreciation of the requirements of fire discipline, men are taught that the rate of fire should be as rapid as is consistent with accurate aiming; that the rate will depend upon the visibility, proximity, and size of the target; and that the proper rate will ordinarily suggest itself to each traned man, usually rendering cantions or commands unnecessary.

In attack the highest rate of fire is employed at the halt preceding the assault, and in pursuing fire.

## 66

## SCHOOL OF THE COMPANY.

256. In an adrance by rushes, leaders of troops in firing positions are responsible for the delivery of heavy fire to cover the advance of each rushing fraction. Troops are trained to change slightly the direction of fire so as not to endanger the flanks of adranced portions of the firing line.
257. In defense, when the target disappears behind cover, platoon leaders suspend fire, prepare their platoons to fire upon the point where it is expected to reappear, and greet its reappearance instantly with vigorous fire.

## SCHOOL OF THE BATTALION.

258. The battalion being purely a tactical unit, the major's duties are primarily those of an instructor in drill and tactics and of a tactical commander. He is responsible for the theoretical and practical training of the battalion. He supervises the training of the companies of the battalion with a view to insuring the thoroughness and uniformity of their instruction.

In the instruction of the battalion as a whole, his efforts will be directed chiefly to the development of tactical efficiency, devoting only such time to the mechanism of drill and to the ceremonies as may be necessary in order to insure precision, smartness, and proper control.
259. The morements explained herein are ou the basis of a battalion of four companies; they may be executed by a battalion of two or more companies, not exceeding six.
260. The companies are geuerally arranged from right to left according to the rank of the captains present at the formation. The arrangement of the companies may be varied by the major or higher commander.

After the battalion is formed, no cognizance is taken of the relative order of the companies.
261. In whatever direction the battalion faces, the companies are designated numerically from right to left in line, and from head to rear in column, first company, second company, etc.

The terms right and left apply to actual right and left as the line faces; if the about by squads be executed when in line, the right company becomes the left company and the right center becomes the left center company.

The designation center company indicates the right center or the actual center company according as the number of companies is even or odd.
262. The band and other special units; when attached to the battaliou, take the same post with respect to it as if it were the nearest battalion shown in Plate IV.

## CLOSE ORDER.

## Rules.

263. Captains repeat such preparatory commands as are to be immediately executed by their companies, as forward, squads right, etc.; the men execute the commands march, halt, etc., if applying to their companies, when given by the major. In


THE BATTALION.
PIate lit. MAOR (WITH STAFFETCf- GUIDE AND DIRECTION-† THE COLOR - NUMERALS ARE DISTANCES OR INTERVALS IN PACES.
morements executed in route step or at ease the captains repeat the command of execution, if necessary. Captains do not repeat the major's commands in executing the manual of arms, nor those commands which are not essential to the execution of a movement by their companies, as column of squads, first company, squads right, etc.

In giving commands or cautions captains may prefix the proper letter designations of their companies, as A Company, HALT; B Company, squads right, ete.

264 . At the command guide center (right or left), captains command: Guide right or left, according to the positions of their companies. Guide center desiguates the left guide of the center company.
265. When the companies are to be dressed, captains place themselves on that flank toward which the dress is to be made, as follows:

The battalion in line: Beside the guide (or the flank file of the front rank, if the guide is not in line) and facing to the front.

The battalion in column of companies: Two paces from the guide, in prolongation of and facing down the line.

Each captain, after dressing his company, commands: FRONT, and takes his post.

The battalion being in line and muless otherwise prescribed. at the captain's command dress, or at the command ha/t, when it is prescribed that the company shall dress, the guide on the flank away from the point of rest, with his piece at right shoulder, dresses promptly on the captain and the companies beyond. During the dress he moves, if necessary, to the right and left only; the captain dresses the company on the line thus established. The guide takes the position of order arms at the command front.
266. The battalion executes the halt, rests, facings, steps and marchings, manual of arms, resumes attention, kneels, lies down, rises, stacks and takes arms, as explained in the Schools of the Soldier and Squad, substituting in the commands battalion for squad.

The battalion executes squads right (left), squads right (left) about, route step and at ease, and obliques and resmmes the direct march, as explained in the School of the Company.

267 . The battalion in column of platoons, squads, twos, or files changes direction; in column of squads forms colum of twos or files and re-forms columns of twos or squads, as explained in the School of the Company.
268. When the formation admits of the simultaneous execution by companies or platoons of movements in the School of the Company the major may cause such morement to be executed by prefixing, when necessary, companies (p/atoons) to the commands prescribed therein: as 1. Companies, right front into line, 2. MARCH. To complete such simmlaneous movements, the
commands halt or march, if prescribed, are given by the major. The command front, when prescribed, is given by the captains.

269 . The battalion as a unit executes the loadings and firings only in firing saluting volleys. The commands are as for the company, substituting battalion for company. At the first command for loading, captains take post in rear of the center of their respective companies. At the conclusion of the firing, the captains resume their posts in line.

On other occasions, when firing in close order is necessary, it is executed by company or other subdivision under instructions from the major.

## To Form the Battalion.

2\%0. For purposes other than ceremonies: The battalion is formed in column of squads. The companies having been formed, the adjutant posts himself so as to be facing the column, when formed, and 6 paces in front of the place to be occupied by the leading guide of the battalion; he draws saber; adjutant's call is sounded or the adjutant signals assemble.

The companies are formed, at attention, in column of squads in their proper order. Each captain, after halting his company, salutes the adjutant; the adjutant returns the salute and, when the last captain has saluted, faces the major and reports: Sir, the battalion is formed. He then joins the major.
27.1. For ceremonies or when directed: The battalion is formed in line.

The companies having been formed, the adjutant posts himself so as to be 6 paces to the right of the right company when line is formed, and faces in the direction in which the line is to extend. He draws saber; adjutant's call is sounded; the band plays if present.

The right company is conducted by its captain so as to arrive from the rear, parallel to the line; its right and left guides precede it on the line by about 20 paces, taking post facing to the right at order arms, so that their elbows will be against the breasts of the right and left files of their company when it is dressed. The guides of the other companies successively prolong the line to the left in like manner and the companies approach their respectire places in line as explained for the right company. The adjutant, from his post, causes the guides to corer.

When about 1 pace in rear of the line, each company is halted and dressed to the right against the arms of the guides.

The band, arriving from the rear, takes its place in line when the right company is halted; it ceases playing when the left company has halted.

When the guides of the left company have been posted, the adjutant, moving br the shortest route, takes post facing the battalion midway between the post of the major and the center of the battalion.

The major, staff, noncommissioned staff, and orderlies take their posts.
When all parts of the line hare been dressed, and officers and others hare reached their posts, the adjutant commands: 1 . Guides, 2. POSTS, 3. Present, 4. ARMS. At the second command guides take their places in the line. The adjutant then turns about and reports to the major: Sir, the battalion is formed; the major directs the adjutant: Take your post, Sir; draws saber and brings the battalion to the order. The adjutant takes his post, passing to the light of the major.

## To Dismiss the Battalion.

## 272. DISMISS YOUR COMPANIES.

Staff and noncommissioned staff officers fall out; each captain marches his company off and dismisses it.

## To Rectify the Alignment.

27.3. Being in line at a halt, to align the battalion: 1. Center (right ol left), 2. DRESS.

The captains dress their companies successively toward the center (right or left) gnide of the battalion, each as soon as the captain next toward the indicated guide commands: Front. The captains of the center companies (if the dress is center) dress them withont waiting for each other.
274. To give the hattalion a new alignment: 1. Guides center (right or left) company on the line, 2. Guides on the line, 3. Center (right or left), 4. DRESS, 5. Guides, 6. POSTS.

At the first command, the designated guides place themselves on the line (par. 271) facing the center (right or left). The major establishes them in the direction he wishes to gire the battalion.

At the second command, the guides of the other companies take posts, facing the center (right or left), so as to prolong the line.

At the command dress, each captain dresses his company to the flank toward which the guides of his company face.

At the command posts, given when all companies hare completed the dress, the guides return to their posts.

## To Rectify the Column.

$2 \% 5$. Being in column of companies, or in close columm, at a halt, if the guides do not cover or have not their proper distances, and it is desired to correct them, the major commands: 1. Right (left), 2. DRESS.

Captains of companies in rear of the first place their right guides so as to cover at the proper distance; each captain aligns his company to the right and commands: FRONT.

## On Right (Left) into Line.

2.6. Being in column of squads or companies: 1. On right (left) into line, 2. MARCH, 3. Eattalion, 4. HALT.

Being in columu of squads: At the first command, the captain of the leading company commands: Squads right. If at a halt each captain in rear commands: Forward. At the second command the leading company marches in line to the right; the companies in rear continue to march to the front and form successively on the left, each, when opposite its place, being marched in line to the right.

The fourth command is given when the first company has adranced the desired distance in the new direction; it halts and is dressed to the right by its captain; the others complete the morement, each being halted 1 pace in rear of the line established by the first company, and then dressed to the right.

Being in column of companies: At the first command, the captain of the first company commands: Right turn. If at a halt, each captain in rear commands: Forward. Each of the captains in rear of the leading company gives the command: 1. Right turn, in time to add, 2. MARCH, wheu his company arrives opposite the right of its place in line.

The fourth command is given and the movement completed as explained above.

Whether executed from column of squads or column of companies, each captain places himself so as to march beside the right guide after his company forms line or changes direction to the right.

If executed in double time, the leading company marches in double time until halted.

## Front into Line.

277. Being in column of squads or companies: 1. Right (Left) front into line, 2. MARCH.

Being in columu of squads: At the first command, the captain of the leading company commands: Column right; the captains of the companies in rear, column half right. At the second command the leading compaby executes column right, and, as the last squad completes the change of direction, is formed in line to the left, halted, and dressed to the left. Each of the companies in rear is conducted by the most courenient route to the rear of the right of the preceding company, thence to the right, parallel to and 1 pace in rear of the new line; when opposite its place, it is formed in line to the left, halted, and dressed to the left.

Being in column of companies: If marching, the captain of the leading company gives the necessary commands to halt his company at the second command; if at a halt, the leading company stands fast. At the first command, the captain of each company in rear commands: Squads right, or Right by squads, and after the second command conducts his company iy the most conreuient route to its place in line, as described abore.

Whether executed from column of squads or colnmi of companies, each captain halts when opmsite or at the point where the left of his company is to rest.

To Form Column of Companies Successively to the Right or Left.
278. Being in colımn:of squads: 1. Column of companies, first company, squads right (left), 2. MARCH.

The leading company executes squads right and moves forward. The other companies move forward in column of squads and successively march in line to the right on the same ground as the leading company and in such manner that the guide covers the guide of the preceding company.

To Form Column of Squads Successively to the Right or Left.
279. Being in column of companies: 1. Column of squads, first company, squads right (left), 2. MARCH.

The leading company executes squads right and mores forward. 'The other companies move forward in column of companies and successively march in column of squads to the right on the same ground as the leading company.

## To Change Direction.

280. Being in column of companies or close column: 1. Column right (left), 2. MARCH.

The captain of the first company commands: Right turn.
The leading company turns to the right on moving pirot, the captain adding: 1. Forward, 2. MARCH, upon its completion.

The other companies march squarely up to the turning point; each changes direction by the same conimands and means as the first and in such manner that the guide covers the guide of the preceding company.
281. Being in line of companies or close line: 1. Battalion right (left), 2. MARCH, 3. Bättalion, 4. HALT.

The right company changes direction to the right; the other companies are conducted by the shortest line to their places abreast of the first.

The fourth command is given when the right company , has advanced the desired distance in the new direction; that company halts; the others halt successively upon arriving on the line.
282. Being in column of squads, the battalion changes direction by the same commands and in the manner prescribed for the company.

## Mass Formations.

283. Being in line, line of companies, column of companies or column of squads: 1. Close on first (fourth) company, 2. MARCH.

If at a halt, the indicated company stands fast: if marching, it is halted; each of the other companies is conducted toward it and is halted in proper order in close column if the indicated company be in line, or in close line if the indicated company be in column of squads.

If the battaliou is in line, companies form successively in rear of the indicated company; if in column of squads, companies in rear of the leading company form on the left of it.

In close column formed from line on the first company, the left guides cover; formed on the fourth company, right guides cover. If formed on the leading company, the guide remains as before the formation. In close line, the guides: are halted abreast of the guide of the leading company.

The battalion in column closes ou the leading company only.

## To Extend the Mass.

284. Being in close column or in close line: 1. Extend on first (fourth) company, 2. MARCH.

Being in close line: If at a halt, the indicated company stands fast; if marching, it halts; each of the other companies is conducted away from the indicated company and is halted in its proper order in line of companies.

Being in close column, the extension is made on the fourth company only. If marching, the leading company continues to march; companies in rear are halted and successively resume the march in time to follow at full distance. If at halt, the leading company marches; companies in rear successively march in time to follow at full distance.

Close column is not extended in double time.
285. Being in close column: 1. Right (Left) front into line, 2. MARCH. Executed as from column of companies.
286. Being in close column: 1. Column of squads, first (fourth) company, squads right (left), 2. MARCH.

The designated company marches in column of squads to the right. Each of the other companies executes the same morement in time to follow the preceding company in columm.
287. Being in close line: 1. Column of squads, first (fourth) company, forward, 2. MARCH.

The desiguated company moves forward. The other companies (halting if in march) successively take up the march and follow in column.

Route Step and At Ease.
288. The battalion marches in route step and at ease as prescribed in the School of the Company. When marching in columu of companies or platoons, the guides maintain the trace and distance.

In route marches the major marches at the head of the column; when necessary, the file closers may be directed to march at the head and rear of their companies.

## Assembly.

289. The battalion being wholly or partially deployed, or the companies being separated: 1. Assemble, 2. MARCH.

The major places himself opposite to or' designates the element or point on which the battalion is to assemble. "Companies are assembled and marched to the indicated point. As the companies arrive the major or adjntant indicates the formation to be taken.

## COMBAT PRINCIPLES.

## Orders.

290. The following references to orders are applicable to attack or defense.
291. In extended order, the company is_the largest unit to execute movements by prescribed commands or means. The major, assembling his captains if practicable, directs the disposition of the battalion by means of tactical orders. He controls its subsequent movements by such orders or commands as are suitable to the occasion.
292. In every disposition of the battalion for combat the major's order should give subordinates sufficient information of the enemy, of the position of supporting and neighboring troops, and of the object songht to enable them to conform intelligently to the general plan.

The order should then designate the companies which are to constitute the firing line and those which are to constitute the support. In attack, it should designate the direction or the objective, the order and front of the companies on the firing line, and should designate the right or left company as base company. In defense, it should describe the front of each company and, if necessary, the sector to be observed by each.
293. When the battalion is operating alone, the major provides for the reconnaissance and protection of his flanks; if part of a larger force, the major makes similar provisions, when necessary, without orders from higher authority, unless such authority has specifically directed other snitable reconnaissance and protertion.
294. When the battalion is deployed upon the initiative of the major, he will indicate whether extra ammunition shall be issued; if deployed in pursuance of orders of higher authority, the major will cause the issue of extra ammunition, unless such authority has given directions to the contrary.

## Deployment.

295. The following principles of deployment are applicable to attack or defense.
296. A premature deployment involves a long, disorganizing and fatiguing advance of the skirmish line, and should bo avoided. A greater evil is to be caught by heavy fire whell in dense column or other close order formation; hence adrantage should be taken of cover in order to retain the battalion in close order formation until exposure to heavy hostile fire may reasonably be anticipated.

297 . The major regulates the depth of the deployment and the extent and density of the firing line, subject to such restrictions as a senior may have imposed.

Companies or designated subdivisions and detachments are conducted by their commanders in such manner as best to accomplish the mission assigned to them under the major's orders. Companies designated for the firing line march independently to the place of deployment, form skirmish line, and take up the advance. They conform, in general, to the base company.
298. The commander of a battalion, whether it is operating alone nr as part of a larger force, should hold a part of his command out of the firing line. By the judicious use of this force the major can exert an influence not otherwise possible over hls firing line and can control, within reasonable limits, an action once begun. So if his battalion be assigned to the firing line the major will cause one, two, or three companies to be deployed on the firing line, retaining the remaining companies or company as a support for that firing line. The clivision of the battalion into firing line and support will depend upon the front to be covered and the nature and anticipated severity of the action.
299. If the battalion be part of a larger command, the number of companies in the firing line will generally be determinable from the regimental commander's order; the remainder constitutes the support. If the battalion is acting alone, the
support must be strong enough to maintain the original fire power of the firing line, to protect the flanks, and to perform the functions of a reserve, whatever be the issue of the action. See paragraph 346 .
300. If the battalion is operating alone, the support may, according to circumstances, be held in one or two bodies and placed behind the center, or one or both flanks of the firing line, or echeloned beyond a flank. If the battalion is part of a larger force, the support is generally held in one body.
301. The distance between the firing line and the supporting group or groups will vary between wide limits; it should be as short as the necessity for protection from heavy losses will permit. When cover is arailable, the support shonld be as close as 50 to 100 yards; when such cover is not available, it should not be closer than 300 yards. It may be as far as 500 yards in rear if good corer is there obtainable and is not obtainable at a lesser distance.
302. In exceptional cases, as in a meeting engagement, it may be necessary to place an entire battalion or regiment in the firing line at the initial deployment, the support being furnished by other troops. Such deployment causes the early mingling of the larger units, thus rendering leadership and control extremely difficult. The necessity for such deployment will increase with the inefficiency of the commander and of the service of information.

## Fire.

303. Fire direction and fire control are functions of company and platoon commanders. The major makes the primary apportionment of the target-iu defense, by assiguing sectors of fire; in attack, by assigning the objective. In the latter case each company in the firing line takes as its target that part of the general objective which lies in its front.

304 . The major should indicate the point or time at which the fire fight is to open. He may do this in his order for deployment or he may follow the firing line close enough to do so at the proper time. If it be impracticable for him to do either, the senior officer with the firing line, in each battalion, selects the time for opening fire.

Attack.
305. The battalion is the attack unit, whether operating alone or as part of a larger unit.
306. If his battalion be one of sevelal in the firing line, the major, in executing his part of the attack, pushes his battalion forward as vigorously as possible within the front, or section, assigned to it. The great degree of independence allowed to him as to details demands, in turn, the exercise of good judg. ment on his part. Better leadership, better troops, and more favorable terrain enable one battalion to adrance more rapidly in attack than another less fortumate, and such a battalion will insure the further adrance of the others. 'The leading battalion should not, however, become isolated; isolation may lead to its destruction.
307. The deployment having been made, the firing line advances without firing. The predominant idea must be to close with the enemy as soon as possible without rninous losses. The limited supply of ammunition and the uncertainty of resupply, the necessity for securing fire superiority in order to adrance within the shorter ranges, and the impossibility of accomplishing this at ineffective ranges, make it imperative that fire be not opened as long as the adrance can be continued withont demoralizing losses. The attack which halts to open fire at extreme range (over 1,200 yards) is not likely ever to reach its destination. Erery effort shonld be made, by using corer or inconspicuous formations, or by adrancing the firing line as a whole, to arrive within 800 yards of the enemy before opening fire.
308. Except when the enemy's artillery is able to effect an unusual concentration of fire, its fire upon deployed infantry canses losses which are unimportant when compared with those inflicted by his infantry; hence the attacking infantry should proceed to a position as described above, and from which an effective fire can be directéi against the hostile infantry with a view to obtaining fire superiority. The effectiveness of the enemy's fire must be reduced so as to permit further adrance. The more effective the fire to which the enemy is subjected the less effective will be his fire.
309. Occasionally the fire of adjacent battalions, or of infantry employing fire of position, or of supporting artillery, will permit the further adrance of the entire firing line from this point, but it will generally be necessary to adrance by rushes of fractions of the line.

The fraction making the rush shonld be as large as the hostile fire and the necessity for maintaining fire superiority will
permit. Depending upon circumstances, the strength of the fraction may rary from a company to a few men.

The advance is made as rapidly as possible without losing fire superiority. The smaller the fraction which rushes, the greater the number of rifles which continue to fire upon the enemy. On the other hand, the smaller the fraction which rushes the slower will be the progress of the attack.
310. Enough rifles must continue in action to insure the success of each rush. Frequently the successive advances of the firing line must be effected by rushes of fractions of decreased size; that is, advances by rushes may first be made by company, later by half company or platoon, and finally by squads or files; but no subsequent opportunity to increase the rate of adrance, such as better cover or a decrease of the hostile fire, should be overlooked.
311. Whenever possible, the rush is begun by a flank fraction of the firing line. In the absence of express dlrections from the major, each captain of a flank company determines when an advance by rushes shall be attempted. A flank company which inaugurates an adrance by rushes becomes the base company, if not already the base. An adrance by rushes having been Inaugurated on one flank, the remainder of the firing lime conforms; fractions rush successively from that flank and halt on the line established by the initial rush.

The fractions need not be uniform in size; each captain indlcates how his company shall rush, having due regard to the ground and the state of the fire fight.
312. A fraction about to rush is sent forward when the remainder of the line is firing vigorously; otherwise the chief advantage of this method of advancing is lost.

The length of the rush will vary from 30 to 50 yards, depending upon the existence of cover, positions for firing, and the hostile fire.
313. When the entire firing line of the battalion has adranced to the new line, fresh opportunities to advance are sought as before.
314. Two identical situations will never confront the battalion; heuce at drill it is prohibited to arrange the details of an advance before the preceding one has been concluded, or to employ a fixed or prearranged method of advancing by rushes.
315. The major posts bimself so as best to direct the reenforcing of the firing line from the support. When all or nearly
all of the support has been absorbed by the firing line. he joins, and takes full charge of, the latter.
316. The reenforcing of the firing line by drlblets of a squad or a few men has no appreciable effect. The firing line requires either no reenforcement or a strong onc. Generally one or two platoons will be sent forward nuder cover of a heary fire of the firing line.
317. To facilitate control and to provide intervals in which reenforcements may be placed, the companies in the firing line should be kept closed in on their centers as they become depleted by casualties during the advance.

When this is impracticable, reenforcements must mingle with and thicken the firing line. In battle the latter method will be the rule rather than the exception, and to tamiliarize the men with such conditions the combat exercises of the battalion should include beth methods of reenforeing. Occasionally, to provide the necessary intervals for reenforcing by either of these methods, the firing line should be thinned by cansing men to drop out and simulate losses during the varions adrances. Under ordinary conditions the depletion of the firing line for thls purpose will be from one-fifth to one-half of its strength.
318. The major or senior oflicer in the firing line determines when bayonets shall be fixed and gives the proper command or signal. It is repeated by all parts of the tiring line. Nach man who was in the front rank prior to deployment,' as soon as he recognizes the command or sigual, suspends firing, quickly fixes his bayonet, and immediately resunes firing; after which the other men suspend firing, fix bayonets, and immediately resume firing. The support also fixes bayonets. The concerted fixing of the bayonet by the firing line at drill does not simulate batile conditions and should not be required. It is essential that there be no marked pause in the firing. Bayonets will be fixed gellerally before or during the last, or second last, advance preceding: the charge.
319. Subject to orders from higher anthority, the major determines the point from which the charge is to be made. The firing line having arrived at that point and being in readiness, the major causes the charge to be somnded. The signal is repeated by the musicians of all parts of the line. The company ofticers lead the charge. The skirmishers spring forward shouting, run with bayonets at charge, and close with the enemy.

The further conduct of the charging troops will depend upon circumstances; they may halt and engage in bayonet combat or $19069^{\circ}-14-6$
in pursuing fire: they may advance a short distance to obtain a field of fire or to drive the enemy from the vicinity; they may assemble or reorganize, etc. If the enemy vacates his position every effort should be made to open fire at oace on the retreating mass, reorganization of the attacking troops being of secondary importance to the infiction of further losses upon the enemy and to the increase of his confusion. In combat exercises the major will assume a situation and terminate the assault accordingly.

## Defense.

320. In defense, as in attack, the battalion is the tactical unit best suited to independent assignment. Defensive positions are usually divided into sections and a battalion assigned to each.
321. The major locates such fire, communicating, and cover trenches and obstacles as are to be constructed. He assigns companies to construct them and details the troops to occupy them.
322. The major reenforces the firing line in accordance with the principles applicable to, and explained in connection with, the attack, maintaining no more lifles in the firing line than are necessary to prevent the enemy's advance.
323. The supply of ammunition being usually ample, fire is opened as soon as it is possible to break up the enemy's formation, stop his adrance, or inflict material loss, but this rule must he modified to suit the ammunition supply.
324. The major causes the firing line and support to fix bayonets when an assault by the enemy is imminent. Captains direct this to be done if they are not in communication with the major and the measure is deemed advisable.

Fire alone will not stop a determined, skillfully conducted attack. The defender must have equal tenacity; if he can stay in his trench or position and cross bayonets, he will at least have neutralized the hostile first line, and the combat will be. decided by reserves.
325. If ordered or compelled to withdraw nnder hostile in-fantry fire or in the presence of hostile infantry, the support will be posted so as to corer the retirement of the firing line.
326. Wheu the battalion is operating alone, the support must be strong and must be fed sparingly into the firing line, especially if a counterattack is planned. Opportunities for counterattack should be sought at all times.

## THE REGIMENT.

327. Normally, the regiment consists of three battalions, but these regulations are applicable to a regiment of two or more

battalions. Special units, such as band, machine-gun company, and mounted scouts, have special formations for their own use.

Movements herein prescribed are for the battalions; special units conform thereto miless otherwise prescribed or directed.
328. The colonel is responsible for the theoretical instruction and practical training of the regiment as a whole. Under his immediate smpervision the training of the units of the regiment is conducted by their respective commanders.
329. The colonel either gives his commands or orders orally, by bugle, or by signal, or commumicates them by staff officers or orderlies.

Each major gives the appropriate commands or orders, and, in close-order movements, causes his battalion to execute the necessary movements at his command of execution. Each major ordinarily moves his battalion from one formation to another, in column of squads, in the most convenient manuer, and, in the presence of the enemy, in the most direct manner consistent with cover.

Commanders of the special mits observe the same principles as to commands and morements. They take places in the new formation as directed by the colonel; in the absence of such directions they conform as nearly as practicable to Plate IV, maintaining their relative positions with respect to the flank or end of the regiment on which they are originally posted.
330. When the regiment is formed, and during ceremonies, the lientenant colonel is posted 2 paces to the left of, and 1 pace less adranced than the colonel. In movements subsequent to the formation of the regiment and other than ceremonies, the lieutenant colonel is on the left of the colonel.
331. In whatever formation the regiment may be, the battalions retain their permanent administrative designations of first, second, third battalion. For convenience, they may be designated, when in line, as right, center, or left battalion; when in column, as leading, center, or rear battalion. These designations apply to the actual positions of the battalions in line or column.
332. Excent at ceremonies, or when rendering honors, or when otherwise directed, after the regiment is formed, the battalions march and stand at ease during subsequent movements.

## CLOSE ORDER.

## To Form the Regiment.

333. Unless otherwise directed, the battalions are posted from right to left, or from head to rear, according to the rank of the battalion commanders present, the senior on the right or at the head. A battalion whose major is in command of the regiment retains its place.
334. For ordinary purposes, the regiment is formed in column of squads or in column of masses.

The aljutant informs the majors what the formation is to be. The battalious and special units haring been formed, he posts himself ant draws saber. Adjutant's call is somided, or the adjutant signals assemble.

If forming in column of squads, the adjutant posts himself so as to be facing the column when formed, and 6 paces in front of the place to be occupied by the leading gnide of the regiment; if forming in column of masses, he posts himself so as to be facing the right guides of the column when formed, and 6 paces in front of the place to be occupied by the right guide of the leading company. Later, he mores so as best to observe the formation.

The battalions are halted, at attention, in column of squads or close column, as the case may be, successively from the front in their proper order and places. The band takes its place when the leading battalion has halted. Other special mits take their places in tum when the rear battalion has halted.

The majors and the commanders of the machine-gon company and mounted scouts (or detachment) each, when his command is in place, salutes the adjutant and commands: At ease; the adjutant returns the salutes. When all have saluted and the band is in place, the adjutant rides to the colonel, reports: Sir, the regiment is formed, and takes his post. The colonel draws saber.

The formation in columm of squads may be modified to the extent demander by circumstances. Prior to the formation the adjutant indicates the point where the head of the column is to rest and the direction in which it is to face; he then posts himself so as best to observe the formation. At adjutant's call or assemble the leading battalion marches to, and halts at, the indicated point. The other battalions take positions from which they may conveniently follow in their moper places.
335. For ceremonies, or when directed, the regiment is formed in line or line of masses.

The adjutant posts himself so as to be 6 paces to the right of the right or leading company of the right battalion when the regiment is formed and faces in the direction in which the line is to extend. Adjutant's call is sounded; the band plays.

The adjntant indicates to the adjutant of the right battalion the point of rest and the direction in which the line is to extend, and then takes post facing the regiment midway between the post of the colonel and the center of the regiment. Each of the other battalion adjutants precedes his battalion to the line and marks its point of rest.

The battalions, arriving from the rear, each in line or close column, as the case may be, are halted on the line successively from right to left in their proper order and places. Upon halting, each major commands: 1. Right, 2. DRESS. The battalion adjutant assists in aligning the battalion and then takes his post.

The band, arriving from the rear, takes its place in line when the right battalion has halted; it ceases playing when the left battalion has halted. The machine-gun company and the mounted scouts (or detachment) take their places in line after the center battalion has halted.

The colonel and those who accompany him take post.
When all parts of the line have been dressed, and officers and all others have reached their posts, the adjutant commands: 1. Present, 2. ARMS. He then turns about and reports to the colonel: Sir, the regiment is formed; the colonel directs the adjutant: Take your post, Sir, draws saber and brings the regiment to the order. The adjutant takes his post, passing to the right of the colonel.

## To Dismiss the Regiment.

336. Being in any formation: DISMISS YOUR BATTALIONS. Each major marches his battalion off and dismisses it.

## Movements by the Regiment.

337. The regiment executes the halt, rests, facings, steps and marchings, manual of arms, resumes attention, kneels, lies down, rises, stacks and takes arms, as explained in the Schools of the Soldier and Squad, substituting in the commands, when necessary, battalions for squad.

The regiment executes squads right (left), squads right (left) about, route step and at ease, obliques and resumes the direct march as explained in the School of the Company.

The regiment in column of files, twos, squads, or platoons, changes direction, and in column of squads forms column of twos or files and re-forms column of twos or squads, as explained in the School of the Company. In column of companies, it changes direction as explained in the School of the Battalion.
338. When the formation admits of the simultaneous execution, by battalions, companies, or platoons, of movements prescribed in the School of the Company or Battalion, the colonel may cause such movements to be executed by prefixing, where necessary, battalions (companies, platoons), to the commands prescribed therein.
8339. The column of squads is the usual column of march; to shorten the column, if conditions permit, a double column of squads may be used, the companies of each battalion marching abreast in two columms. Preliminary to an engagement, the regiment or its units will be placed in the formation best suited to its subsequent tactical employment.
340. To assume any formation, the colonel indicates to the majors the character of the formation desired, the order of the battalions, and the point of rest. Each battalion is conducted by its major, and is placed in its proper order in the formation, by the most convenient means and ronte.

Haring halted in a formation, no morements for the purpose of correcting minor discrepancies in alignments, intervals, or distances are made unless specially directed by the colonel or necessitated by conditions of corer.
341. To correct intervals, distances, and alignments, the colonel directs one or more of the majors to rectify their battalions. Each major so directed canses his battalion to correct its alignment, intervals, and distances, and places it in its proper position in the formation.

## COMBAT PRINCIPLES.

342. The regiment is deployed by the colonel's order to the commanders of battations and special mits. The order should give them information of the situation and of the proposed plan of action. In attack, the order should assign to eacli battalion not in reserve its objective or line of advance. In defense, it should assign to earli its sector. In either case it
should designate the troops for, and the position of, the reserve and prescribe the employment of the machine guns and mounted scouts.

Both in attack and defense the order may fix the front to be covered in the deployment.

Encroachment upon the proper functions of subordinates and unnecessary details should be studiously aroided. When the regiment deploys, the colonel habitually places the band at the disposal of the surgeon for employment in caring for the wounded.
343. The regiment, when operating alone and attacking. should undertake an enreloping attack if it does not result in grerextension.

Assuming a regiment of 1,500 rifles, an extension of more than 1,000 yards between its extreme flanks when making an enreloping attack alone is seldom justifiable; when part of a battle line, a front of 500 yards can rarely be exceeded.
344. In defense the front occupied when acting alone or posted on or near the flank of a battle line shonld seldom exceed 600 vards; when posted as an interior regiment, the front may be increased to 800 yards. The front may be somewhat longer than in the attack, since smaller battalion supports are justifiable. When the regiment is operating alone, however, the regimental reserve should be as strong in the defense as in the attack unless the flanks are secure.
345. The colonel should always hold ont a reserve-generally one battalion; but when the regiment is operating alone, it is generally advisable to hold out more at first.
346. Whereas the support held out in each battalion of the firing line is intended to thicken the diminishing firing line at the proper times and sometimes to lengthen it, the reserve held out in a regiment operating alone is used for this purpose only as a last resort. Its primary functions are: In attack, to protect the flanks, to improre fully the advantage following a victory, or to cover defeat; in defense, to prolong the firing line, to effect a counterattack, or to cover withdrawal. It is the colonel's chief means of influencing an action once begun. It should be conserved to await the proper moment for its employment; the combat will seldom come to a successful issue without its employment in some form.

The reserve of a regiment operating as part of a large force becomes a local reserve. It replaces depleted supports and, in attack strengthens and protects the firing line in the charge.

## THE BRIGADE.

347. The brigade does not engage in prescribed drills. It engages in route marches and battle or other tactical exercises. These are conducted pursuant to commands or orders formulated to suit the conditions of the proposed movement or exercise, and, in general, in accordance with the principles applicable to the regiment.
348. A brigade of about 4,000 riffes, as part of a general battle line, would be deployed on a front of not more than 1,200 yards in attack or 1,600 sards in defense.

When acting alone the distance between extreme flanks in an enveloping attack should not exceed 2,000 yards at the time the attacking infantry opens fire.

When acting alone, the front in defense should not exceed 1,600 yards.

These limits apply to the original deployment of the brigade for combat and presuppose an enemy of equal or nearly equal training and morale. The limits necessitated by the subsequent progress of the combat can not be foreseen.
349. Units larger than the brigade are gencrally composed of all arms. Combined tactics are considered in the Field Service Regulations.

(1)

## Part II.-COMBAT.

## INTRODUCTION.

350. Part II of these regulations treats mily of the basic principles of combat tactics as applied to infantry and to the special units, such as machine gnns and mounted scouts, which form a part of infantry regiments and battalions.

The combat tactics of the arms combined are considered in Field Service Regulations.
351. Modern combat demands the highest order of training, discipline, leadership, and morale on the part of the infantry. Complicated maneuvers are impracticable; efficient leadership and a determination to win by simple and direct methods must be depended upou for success.
352. The duties of infantry are many and difficult. All infantry must be fit to cope with all conditions that may arise. Modern war requires but one kind of infantry-good infantry.
353. The infantry must take the offensire to gain decisive results. Both sides are therefore likely to attempt it, though not necessarily at the same time or in the same part of a long battle line.

In the local combats which make up the general battle the better endurance, use of ground, fire eflicieney, discipline, and training will win. It is the duty of the infantry to win the local successes which enable the commanding general to win the battle.
354. The infantry must have the temacity to hold every advantage gained, the individual and collective discipline and skill needed to master the euemy's fire, the determination to close with the enemy in attack, and to meet him with the bayonet in defense. Infantry must be trained to bear the heariest burdens and losses, both of combat and march.

Gond infaritry can defeat an enemy greatly superior in numbers, but lacking in training, discipline, leadership, and morale.
355. It is impossible to establish fixed forms or to gire general instructions that will cover all cases. Officers and noncommissioned officers must be so trained that they can apply suitable means and methods to each case as it: arises. Study and practice are necessary to acquire proper facility in this respect. Theoretical instruction can not replace practical instruction; the former supplies correct ideas and gives to practical work an interest, purpose, and definiteness not otherwise obtainable.
356. After the mechanism of extended order drill has been learned with precision in the company, every exercise should be. as far as practicable, in the natmre of a maneuver (combat exercise) against an imaginary, out/ined, or represented enemy.

Company extended order drill may be conducted withont reference to a tactical situation, but a combat exercise, wlatever may be the size of the mit employed, should be conducted under au assumed tactical situation.
357. An effective method of conducting a combat exercise is to outline the enemy with a few men equipped with flags. The mmpire or inspector states the situation and the commander leads his troops with due regard to the assumptions made.

Changes in the situation, the results of reconnaissance, the character of artillery fire, etc., are made known to the commander when necessary by the umpire or inspector, who, in order to observe and influence the conduct of the exercise, remains in rear of the firing line. From this position he indicates, with the aid of prearranged signals, the character of the fire and movements of the hostile infantry. These signals are intended for the men outlining the enemy. These men repeat the signals; all officers and men engaged in the exercise and in sight. of the outlined enemy are thus informed of the enemy's action and the exercise is conducted accordingly.

Assistant umpires, about one for each company in the firing line, may assist in indicating hostile fire and movements and in observing the conduct of the exercise.

An outlined enemy may be made to attack or defend.
Situations should be simple and natural. During or after the exercise the umpire or inspector should call attention to any improper movements or incorred methods of execution. He will prohibit all movements of troops or individnals that would
be impossible if the enemy repe real. The slow progress of events to be expected on the battle field can hardly be simulated. but the umpire or inspector will prevent undue haste and wlll attempt to enforce a reasonably slow rate of progress.

The same exercise should not be repeated over the same ground and under the same situation. Such repetitions lead to the adoption of a fixed mode of attack or defense and develop mere drill masters. Fixed or prearranged systems are prohibited.

## LEADERSIIIP.

## General Considerations.

358. The art of leadership consists of applying sound tactical principles to concrete cases on the battle field.

Self-reliance, initiative, aggressiveness, and a conception of teamwork are the fumdamental chatacteristics of successful leadership.
359. A correct grasp of the situation and a definite plan of action form the somndest basis for a successful combat.

A good plan once adopted and put into execution should not be abandoned unless it becomes clear that it can not succeed. Afterthoughts are dangerous, except as they aid in the execution of details in the original plan.
360. Cumbats that do not promise success or some real advantage to the general issue should be avoided ; they cause unnecessary losses, impair the morale of one's own troops, and raise that of the enemy.

- \$361. Complicated maneurers are not likely to succeed in war. All plans and the methods adopted for carrying them into effect must be simple and direct.

362. Order and cohesion must be maintained within the units if success is to be expected.
363. Officers must show themselves to be true leaders. They must act in accordance with the spirit of their orders and must require of their troops the strictest discipline on the field of battle.
364. The best results are obtained when leaders know the capacity and traits of those whom they command; bence iu making detachments units should not be broken up, and a deployment that would cause an intermingling of the larger units in the firing line should be avoided.
365. Leading is difficult when troops are deployed. A high degree of training and discipline and the use of close order formations to the fullest extent possible are therefore required.
366. In order to lighten the severe physical strain inseparable from infantry service in campaign, constant efforts must be made to spare the troops unnecessary hardship and fatigue; but when necessity arises, the limit of endurance must be exacted.
367. When officers or men belonging to fighting troops leare their proper places to carry back, or to care for, wounded during the progress of the action, they are guilty of skulking. This offense must be repressed with the utmost rigor.
368. The complete equipment of the soldier is carried into action unless the weather or the physical condition of the men renders such measure a severe hardship. In any event, only the pack ${ }^{1}$ will be laid aside. The determination of this question rests with the regimental conmmander. The complete equipment affords to men lying prone considerable protection against shrapnel.
369. The post of the commander must be such as will enable him to observe the progress of events and to communicate his orders. Subordinate commanders, in addition, must be in position to transmit the orders of superiors.

Before entering an action the commander should be as far to the front as possible in order that he personally may see the situation, order the deployment, and begin the action strictly in accordance with his own wishes.

During the action, he must, as a rule, leave to the local leaders the detailed conduct of the firing line, posting himself either with his own reserve or in such a position that he is in constant, direct, and easy communication with it.

A commander takes full and direct charge of his firing line only when the line has absorbed his whole command.

When their troops are victorious, all commanders should press forward in order to clinch the advantage gained and to use their reserves to the best advantage.
370. The latitude allowed to officers is in direct proportion to the size of their commands. Each shonld see to the general execution of his task, leaving to the proper subordinates the

[^1]supervision of details, and interfering only when mistakes are made that threaten to serionsly prejudice the general plan.

## Teamwork.

371. The comparatively wide fronts of deployed units increase the difficulties of control. Subordinates must therefore be given great latitude in the execution of their tasks. The success of the whole depends largely upon how well each subordinate coordinates his work with the general plan.

A great responsibility is necessarily thrown upon subordinates, but responsibility stimulates the right kind of an officer.
$\mathbf{3 7 2}$. In a given situation it is far better to do any intelligent thing consistent with the aggressive execution of the general plan, than to search hesitatingly for the ideal. This is the trine rule of conduct for subordinates who are required to act upon their own initiative:

A subordinate who is reasonably sure that his intended action is such as wonld be ordered by the commander, were the latter present and in possession of the facts, has enough encouragement to go ahead confidently. He must possess the loyalty to carry out the plans of his superior and the keenness to recognize and to seize opportmities to further the general plan.
373. Independence must not become license. Regardless of the number of subordinates who are apparently supreme in their own restricted spheres, there is but one battle and but one supreme will to which all must conform.

Every subordinate must therefore work for the general result. He does all in his power to insure cooperation between the subdivisions mader his command. He transmits important information to adjoining units or to superiors in rear and. with the assistance of information received, keeps himself and his subordinates duly posted as to the situation.

374 . When circminstances render it impracticable to consult the authority issuing an order, officers should not hesitate to vary from such order when it is clearly based upon an incorrect view of the sitnation, is impossible of execution, or has been rendered impracticable on account of changes which have occurred since its promulgation. In the application of thls rule the responsibility for mistakes rests upon the subordinate, but
unwillingness to assume responsibility on proper occasions is indicative of weakness.

Superiors should be careful not to censure an apparent disobedience where the act was done in the proper spirit and to advance the general plan.
375. When the men of two or more nnits intermingle in the firing line, all officers and men submit at once to the senior. Officers and platoon guides seek to fill vacancies caused by casualties. Each seizes any opportunity to exercise the functions consistent with his grade, and all assist in the maintenance of order and control.

Every lull in the action should be ntilized for as complete restoration of order in the firing line as the ground or other conditions jeermit.
376. Any oflicer or noncommissioned officer who becomes separated from his proper unit and can not rejoin must at once place himself and his command at the disposal of the nearest higher commander:

Anyone having completed an assigned task must seek to rejoin his proper command. Failing in this, he should join the nearest troops engaged with the enemy.
377. Soldiers are tanght the necessity of remaining with their companies, but those who become detached must join the nearest company and serve with it until the battle is over or reorganization is ordered.

## Orders.

378. Commands are deployed and enter the combat by the orders of the commander to the subordinate commanders.

The initial combat orders of the division are almost invariably written; those of the brigade are generally so. The written order is preferable and is used whenever time permits.

If time permits, subsequent orders are likewise written, either as field orders or messages.
379. The initial combat orders of regiments and smaller units are given verbally. For this purpose the subordinates for whom the orders are intended are assembled, if practicable, at a place from which the situation and plan can be explained.

Subsequent orders are verbal or in the form of verbal or written messages. Verbal messages should not be used unless. they are short and unmistakable.
380. The initial combat order of any commander or subordlnate is based upon his definite plan for executing the task confronting him.

Whenerer possible the formation of the plan is preceded by a personal recomaissance of the termin and a careful consideration of all information of the enemy.
381. The combat order gives such information of the enemy and of neighboring or supporting friendly troops as will enable subordinates to understand the situation.

The general plan of action is stated in brief terms, but cuough of the commander"s intentions is dirviged to guide the subsequent actions of the subordinates.

Clear and concise instructions are given as to the action to be taken in the combat by each part of the command. In this way the commander assigns tasks, fronts, objectires, sectors or areas, etc., in accordance with his plan. If the terms employed convey definite ideas and leave no loopholes, the conduct of subordinates will generally be correspondingly satisfactory.

Such miscellaneous matter relating to special troops, trains, ammunition, and future morements of the commander is added as concerns the combat itself.

Combat orders should prescribe communication, reconnaissance, flank protection, etc., when some special disposition is desired or when an omission on the part of a subordinate may reasonably be feared.

382 . When issuing orders, a commander should indicate clearly what is to be done by each subordinate, but not how it is to be done. He should not encroach upon the functions of a subordinate by prescribing details of execution unless he has good reason to doubt the ability or judgment of the subordinate, and can not substitute another.

Although general in its terms, an order must be definite and must be the expression of a fixed decision. Ambiguity or vagueness indicates either vacillation or the inability to formulate orders.
383. Usually the orders of a commander are intended for. and are given to, the commanders of the next lower units, but in an emergency a commander should not hesitate to give orders directly to any subordinate. In such case he should promptly inform the intermediate commander concerned,

## Communication.

384. Commmication is maintained by means of staff officers, messengers, relay systems, connecting files, visual signals, telegraph, or telephone.
385. The signal corps troops of the division establish lines of information from division to brigade headquarters. The further extension of lines of information in combat by signal troops is exceptional.
386. Each regiment, employing its own personnel, is responsible for the maintenance of commmication from the colonel back to the brigade and forward to the battalions. For this purpose the regiment ases the various means which may be furnished it. The staff and orterlies, regimental and battalion, are practiced in the use of these means and in messenger service. Orderlies carry signal flags.
387. Connection between the firing line and the major or colonel is practically limited to the prescribed flag, arm, and bugle signals. Other means can only be supplemental. Company musicians carry company flags and are practiced in signaling.
388. The artillery generally communicates with the firing line by means of its own staff officers or through an agent who accompanies some unit in or near the front. The infantry keels him informed as to the sitnation and affords him any reasonable assistance. When the infantry is dependent upon the artillery for fire support, perfect coordination through this representative is of great importance.

## COMBAT RECONNAISSANCE.

389. Combat reconnaissance is of vital importance and must not be neglected. By proper preliminary reconnaissance, deployments on wrong lines, or in a wrong direction, and surprises may generally be prevented.
390. Troops deployed and under fire can not clange front and thus they suffer greatly when enfiladed. Irouns in close order formation may suffer heavy losses in a short time if subjected to hostile fire. In both formations troops must be protected by proper reconnaissance and warning.
391. The difficulty of reconnaissance increases in proportion to the measures adopted by the enemy to screen himself.

The strength of the reconnoitering party is determined by the character of the information desired and the nature of the hostile screen. In exceptional cases as much as a battalion may be necessary in order to break through the hostile screen and enable the commander or officer in charge to reconnoiter in person.

A large reconnoitering party is conducted so as to open the way for small patrols, to serve as a supporting force or rallying point for them, and to receive and transmit information. Such parties maintain signal communication with the main body if practicable.
392. Lach separate column moving forward to deploy must recomnoiter to its front and flank and keep in touch with adjoining columns. The extent of the reconnaissance to the flank depends upon the isolation of the columns.
393. Before an attack a reconnaissance must be made to determine the enemy's position, the location of his flanks, the character of the teriain, the nature of the hostile field works, etc., in order to prevent premature deployment and the resulting fatigue and loss of time.

It will frequently be necessary to send forward a thin skirmish line in order to induce the enemy to open fire and reveal his position.
394. It will frequently be impossible to obtain satisfactory information until after the action has begun. I'he delay that may be warranted for the purpose of reconnaissance depends upon the nature of the attack and the necessity for promptness. For example, in a meeting engagement, and sometimes in a holding attack, the reconnaissance may have to be hasty and superficial, whereas in an attack against an enemy carefully prepared for defense there will generally be both time and necessity for thorough reconnaissance.
395. In defense, reconnaissance must be kept up to determine the enemy's line of advance, to ascertain his dispositions, to prevent his reconnaissance, etc.

Patrols or barties posted to prevent hostile reconnaissance should relieve the main body of the necessity of betraying its position by firing on small bodies of the enemy,
346. Reconnaissance continues througlont the action.

A firing or skirmish line can take care of its front, but its flanks are especially rulnerable to modern firearms. The moral effect of flanking fire is as great as the physical effect. Hence, combat patrols to give warning or covering delachments to give security are indispensable on exposed flanks. This is equally true in attack or defense.

397 . The fact that cavalry patrols are known to be posted in a certain direction does not relieve infantry commanders of the responsibility for reconnaissance and security.

To be surprised by an enemy at short range is an unpardonable offense.
398. The commander of a battalion on a flank of a general line invariably provides for the necessary reconnaissance and security on that flank unless higher authority has specifically ordered it. In any event, he sends out combat patrols as needed.

Where his battalion is on a flank of one section of the line and a considerable interval lies between his battallon and the next section, he makes similar provision.
399. Battalion commanders in the first line establish patrols to observe and report the progress or conduct of adjoining troops when these can not be seen.

## FIRE SUPERIORITY.

## PURPOSE AND NATURE.

400. In a decisive battle success depents on gaining and maintaining fire superiority. Every effort must be made to gain it early and then to keep it.

Attacking troops must first gain fire superiority in order to reach the hostile position. Orer open ground attack is possible only when the attacking force has a decided fire superiority. With such superiority the attack is not only possible, but success is probable and without rumous losses.

Defending troops can prevent a charge only when they can master the enemy's fire and inflict heary losses upon him.
401. To obtain fire superiority it is necessary to produce a heavy volume of accurate fire. Every increase in the effectiveness of the fire means a corresponding decrease in the effectiveness of the enemy's fire.

The volume and accuracy of fire will depend upon several considerations:
(a) The number of rifles employed. On a given front the greatest volume of fire is produced by a firing line having only sufficient intervals between men to permit the free use of their rifles. The maximum density of a firing line is therefore about one inan per yard of front.
(b) The rate of fire affects its volume; an excessive rate reduces its accuracy.
(c) The character of the target influences both volume and accuracy. Larger dimensions, greater visibility, and shorter range increase the rate of fire; greater density increases the effect.
(d) Training and discipline have an important bearing on the rate or volume of fire, but their greatest influence is upon accuracy.

The firing efficiency of troops is reduced by fatigue and adverse psychological influences.
(e) Fire direction and control improve collective accuracy. The importance of fire direction increases rapidly with the range. Control exerts a powerful influence at all ranges.

## FIRE DIRECTION AND CONTROL.

## Opening Fire.

402. Beyond effective ranges important results can be expected only when the target is large and distinct and much ammunition is used.

Long-range fire is permissible in pursuit on account of the moral effect of any fire under the circumstances. At other times such fire is of doubtful value.
403. In attack, the desire to open fire when losses are first felt must be repressed. Considerations of time, target, ammunition, and morale make it imperative that the attack withhold its fire and press forward to a first firing position close to the enemy. The attacker's target will be smaller and fainter than the one he mesents to the enemy.
404. In defense, more anmunition is available, ranges are more easily determined, and the enemy usually presents a larger target. The defender mas therefore open fire aud expect results
at longer ranges than the attacker, and particularly if the defenders intend a delaying action only.

If the enemy has a powerful artillery, it will often be best for the defending infantry to withhold its fire until the enemy offers a specially favorable target. Vigorous and well-directed bursts of fire are then employed. The troops should therefore be given as much artificial protection as time and means permit, and at an agreed sigual expose themselves as much as necessary and open fire.
'. 405. In mnexpected, close encounters a great advantage accrues to the side which first opens rapid and aceurate fire with battle siglit.

## Use of Ground.

ir 406. The position of the firers must afford a suitable field of fire.
The ground should permit constant observation of the enemy, and yet enable the men to secure some cover when not actually firing.

Troops whose target is for the moment hidden by unfavorable gromd, either move forward to better ground or seek to execnte cross fire on another target.
407. The likelihood of a target being hit depends to a great extent upon its visibility. By skillful use of ground, a firing line may reduce its visibility without loss of fire power. Sky lines are garticularly to be avoided.

## Choice of Target.

408. The target chosen shonld be the hostile troops most dangerous to the firers. These will usually be the nearest hostile infantry. When no target is specially dangerous, that one should be chosen which promises the most hits.
409. Frequent changes of target impair the fire effect. Random changes to small, unimportant targets impair fire discipline and accomplish nothing. Attention should be confined to the main target umtil substantial reason for change is apmarent.
410. An opmortunity to deliver Hanking fire, especially against artillery protected in front by shields, is an eximple warranting change of target and shonld never be overlooked. Such fire demoralizes the troops subjected to it, eren if the losses in-
flicted are small. In this manner a relatively small number of riftes can produce important results.

## The Range.

411. Reyond close range, the correct setting of the rear sight is of primary importance, provided the troops are trained and well in hand. The necessity for correct sight setting increases rapidly with the range. Its importance decreases as the quality of the troops decrease, for the error in sight setting, except possibly at very long ranges, becomes unimportant when compared with the error in holding and aiming.
412. Iu attack, distances must nsually be estimated and corrections made as errors are observed. Mechanical range finders and ranging volleys are practicable at times.

In defense, it is generally practicable to measure more accurately the distances to visible objects and to keep a record of them for future nse.

## Distribution of Fire and Target.

413. The purpose of fire superiority is to get hits whenever possible, but at all events to keep down the enemy's fire and render it harmless. To accomplish this the target must be corered with fire throughont its whole extent. Troops who are not fired upon will fire with nearly peace-time accuracy.

The target is ronghly divided and a part is assigned to each unit. No part of the target is neglected. In attack, by a system of overlapping in assigning targets to platoons, the entire hostile line can be kept under fire even during a rush.

## Observation.

414. The correctness of the sight setting and the distribution of fire over the target can be verified only by careful observation of the target, the adjacent gromnd, and the effect upon the enemy.
415. Observation only can determine whether the fire fight is being properly conducted. If the enemy's fire is losing in accuracy and effect, the observer realizes that his side is gaining superiority. If the enemy's fire remains or becomes effective and persistent, he realizes that corrective measures are necessary to increase either volume or accuracy, or both.

## Discipline.

416. Discipline makes good direction and control possible and is the distinguishing mark of trained troops.
417. The discipline necessary in the firing line will be absent unless officers and noncommissioned officers can make their will known to the men. In the company, therefore, commnnication must be by simple signals which, in the roar of musketry, will attract the attention and convey the correct meaning.

## Expenditure of Ammunition.

418. In attack the supply is more limited than in defense. Better judgment must be exercised in expenditure. Ordinarily, troops in the firing line of an attack can not expect to have that day more ammunition than they carry into the combat, except such additions as come from the distribution of ammunition of dead and wounded and the surplus brought by reinforcements.
419. When a certain fire effect is required, the necesary ammunition must be expended without hesitation. Several hours of firing may be necessary to gain fire superiority. True economy can be practiced only by closing on the enemy before first opening fire and thereafter suspending fire when there is nothing to shoot at.

## Supporting Artillery.

420. Artillery fire is the principal aid to the infantry in gaining and keeping fire superiority, not only by its hits, but by the moral effect it produces on the enemy.
421. In attack, artillery assists the forward movement of the infantry. It keeps down the fire of the hostile artillery, and seeks to nentralize the hostile infantry by inflicting losses upon it, destroying its morale, driving it to cover, and preventing it from using its weapons effectively.

In defense, it ignores the hostile artillery when the enemy's attack reaches a decisive stage and assists in checking the attack, joining its fire power to that of the defending infantry.

422 . Troops should be accustomed to bring fired over by friendly artillery and impressed with the fact that the artillers should continne firing upon the enemy until the last possible
moment. The few casualties resulting from shrapnel bursting shor't are trifling compared with those that would result from the increased effectiveness of the enemy's infantry fire were the friendly artillery to cease firing.

Casualties inflicted by supporting arillery are not probable until the opposing infantry lines are less than 200 yards apart.
423. When the distance between the hostile infantry lines hecomes so short as to render further use of friendly artillery inadvisable, the commander of the infantry firing line, using a preconcerted signal, ${ }^{1}$ informs the artillery commander. The latter usually increases the range iu order to impede the strengthening of the enemy's foremost line.

## Fire of Position.

424. Infantry is said to execute fire of position when it is posted so as to assist an attack by firing over the heads, or off the flank, of the attacking troops and is not itself to engage in the adrance; or when, in defense, it is similarly posted to augment the fire of the main firing line.

Machine guns serve a like purpose.
In a decisive action, fire of position should be employed whenever the terrain permits and reserve infantry is available.

## DEPLOYMENT.

425. Troops are massed preparatory to deployment when the nature of their deployment can not be foreseen or it is desirable to shorten the column or to clear the road. Otherwise. in the deployment of large commands, whether in march column, in bivouac, or massed, and whether forming for attack or for defense, they are ordinarily first formed into a line of columns to facilitate the extension of the front prior to deploying.

The rough line or lines of columns thus formed enable troons to take advantage of the terrain in advancing and shorten the time occupied in forming the firing line.
426. In deploying the division each brigade is assigned a definite task or objective. On receint of his orders, the brigade

[^2]commander conducts his brigade in column or in line of regiments until it is advisable that it be broken into smaller columns. He then issues his order, assigning to each regiment its task, if practicable. In a similar manner the regimental commanders lead their regiments forward in column, or in line of columns, until the time arrives for issuing the regimental order. It is seldom adrisable to break up the battalion before issuing orders for its deployment.
427. Each subordinate commander, after receiving his order for the action, should precede his command as far as possible, in order to reconnoiter the ground personally, and should prepare to issue his orders promptly.
428. Each commander of a column directs the necessary reconnaissance to front and flauk; by this means and by a judicious choice of gromd he guards against surprise.
429. The premature formation of the firing line causes unnecessary fatigue and loss of time, and may result in a faulty direction being taken. Troops once deployed make even minor changes of direction with difficulty, and this difficulty increases with the length of the firing line.
430. In the larger units, when the original deployment is found to be in the wrong direction, it will usually be necessary to deploy the reserve on the correct front and withdraw and assemble the first line.
431. To gain decisive results, it will generally be necessary to use all the troops at some stage of the combat. But in the begimning, while the situation is meertain, care should be taken not to engage too large a proportion of the command. On the other hand, there is no greater error than to employ too few and to sacrifice them by driblets.
432. When it is intended to fight to a decision, fire superiority is essential. To gain this, two things are necessary: A heavy fire and a fire well directed and controlled. Both of these are best obtained when the firing line is as dense as practicable, while leaving the men room for the free use of their rifles.

If the men are too widely separated, direction and control are very difficult, often impossible, and the intensity of fire is slight in pronortion to the front occupied.
433. In an attack or stubborn defense the firing line should have a density of one man per yard of front occupied.

Where the tactical situation demands the holding of a line too long to be occupied throughont at this density, it is generally better to deploy companies or platoons at one man per yard, leaving gaps in the line between them, than to distribute the men uniformly at increased intervals.
434. A relatively thin firing line may be employed when merely covering the movements of other forces; when on the defensive against poor troops; when the final action to be taken has not yet been determined; and, in general, when fire superiority is not necessary.
435. The length of the firing line that the whole force may employ denends upon the density of the line and the strength in rear required by the situation.

Supports and reserves constitute the strength in rear.
In a decisive attack they should be at least strong enough to replace a heary loss in the original firing line and to increase the charging line to a density of at least one and one-half men per yard and still have troops in rear for protection and for the other purposes mentioned abore.
436. In the original deployment the strength of the reserve held out by each commander comprises from one-sixth to twothirds of his mit, depending upon the nature of the service expected of the reserve.

A small force in a covering or delaying action requires very little strength in rear, while a large force fighting a decisive battle requires much. Therefore, depending upon circumstances, the original deployment, including the strength in rear, may vary from 1 to 10 men per yard. Against an enemy poorly disciplined and trained, or lacking in morale, a thinner delloyment is permissible.
437. The density of the whole deployment increases with the size of the command, because the larger the command the greater the necessity for reserves. Thus, a battalion acting alone may attack with two men per yard of front, but a regiment, with three battalions, may only double the front of the one battalion.
438. By the assignment of divisions or larger units to parts of a line of battle several miles long, a series of semi-independent Lattle, or local combat, districts are created.

The general deployment for a long line of battle comprising sereral battle districts is not directly considered in these regula-
tions. The deployments treated of herein are those of the infantry within such districts.

The density of deployment in these districts may vary greatly, depending mon the activity expected in each. Within these battle districts, as well as in smaller forces acting alone, parts of the line temporarily of less importance may be held weakly, in order to economize troops and to have more at the decisive point.
439. The front that a unit may occupy when deployed depends also upon whether its flanks are secured. If both flanks are secured by other troops, the unit may increase its front materially by reducing its reserve or supports. If only one flank is so secured, the front may still be somewhat increased, but the exposed flank must be guarded by posting the supports or reserve toward that llank.

Natural obstacles that secure the flanks have practically the same effect upon deployment.
440. Excent when assigned as supports or reserve, regiments in the brigade, battalions in the regiment, and companies in the battalion are, when practicable, deployed side by side.
441. In the deployment, battalions establish the firing line, each furnishing its own support.

In each unit larger than the battalion a reserve is held out, its strength depending upon circumstances. In general, the reserve is employed by the commander to meet or improve conditions brought about by the action of the firing line. It must not be too weak or too split up. It must be posted where the commander believes it will be needed for decisive action, or where he desires to bring about such action. When necessary, parts of it reenforce or prolong the firing line.

## ATTACK.

442. An attack is bound to succeed if fire superiority is gained and properly used.

To gain this superiority generally requires that the attack employ more rifles than the defense; this in turn means a longer line, as both sides will probably hold a strong firing line.
443. With large forces, a direct frontal attack gives the attacker little opportunity to bring more rifles to bear. However, if the enemy is unduly extended, a frontal attack may give very decisive results.
444. Owing to the difficulty of control and the danger of the parts being defeated in detail, wide turning movements are seldom allowable excent in large forces.
445. If the attack can be so directed that, while the front is covered, another fraction of the command strikes a flank more or less ohliquely (an enveloping attack) the advantages gained are a longer line and more rifles in action; also a converging fire opposed to the enemy's diverging fire.
446. An envelopment of both flanks should never be attempted without a very decided superiority in numbers.
447. The enveloping attack will nearly always result locally in a frontal attack, for it will he met by the enemy's reserve. The advantage of envelopment lies in the longer concentric line, with its preponderance of rifles and its converging fire.
448. Cooperation between the froutal and enveloping attacks is essential to success. loth should be pushed vigorously and simultaneously, and ordinarily both should move simultaneously to the charge; but at the final stage of the attack conditions may sometimes warrant one in charging while the other supports it with fire.

The enrelopment of a flank is brought about with difficulty when made by troops already deployed in another direction or by their reserves. The two attacks should be deployed at a suitable distance apart, with the lines of attack converging in rear of the hostile position. The troons that are to make the enveloping attack should deploy in the proper direction at the start and should be giren orders which enable them to gain their point of denloyment in the most direct and practical mauner.

The enveloning attack is generally made the stronger, especially in simall forces.

## DEPLOYMENT FOR ATTACK.

449. Where open terrain exposes troons to hostile artillery fire it may be necessary to make the deployment 2 miles or more from the hostile position.

The foreground should be temporarlly occupied by covering troops. If the enemy occupies the foreground with detachments, the covering troops must drive them back.
450. To enable large forces to gain ground toward the enemy, it may sometimes be cheaper and quicker in the end to move well
forward and to deploy at night. In such case the area in which the deployment is to be made should, if practicable, be occupied by covering troops before dark.

The deployment will be made with great difficulty unless the ground has been studied by daylight. The deployment gains little unless it, establishes the firing line well within effective range of the enemy's main position. (See Night Operations.)
451. Each unit assigned a task deploys when on its direction line, or opposite,its objective, and when it has no longer sufficient cover for advancing in close order. In the firing line, intervals of 25 to 50 yards should be maintained as long as possible between battalions. In the larger units it may be necessary to indicate on the map the direction or objective, but to battalion commanders it should be pointed out on the ground.

452 , The reserve is kept near enough to the firing line to be on hand at the decisive stage. It is posted with reference to the attack, or to that part of the attacking line, from which the greater results are expected ; it is also charged with flank protection, but should be kept intact.

Supprts are considered in paragraphs 225 to $22 S$, inclusive, and 298 to 302 , inclusive.

## advancing the attack.

453. The firing line must ordinarily advance a long distance before it is justified in opening fire. It can not combat the enemy's artillery, and it is at a disadvantage if it combats the defender's long-range rifle fire. Hence it ignores both and, by taking full advantage of cover and of the discipline of the troons, advances to a first firing position at the shortest range possible.

Formations for crossing this zone with the minimum loss are considered in paragraphs 212 to 220 , inclusive. These and other methods of crossing such zones should be studied and practiced.
454. The best protection against loss while advancing is to escape the enemy's view.
45.5. Each battalion finds its own firing position, conforming to the general advance as long as practicable and taking advantage of the more adranced position of an adjacent battalion in order to gain grommd.

The position from which the attack opens fire is further considered in paragraphs 306 to $: 308$, inclusive.
456. It will frequently become necessary for infantry moving to the attack to pass through deployed artillery. This should be done so as to interfere as little as possible with the latter's fire, and never so as to cause that fire to cease entirely. As far as practicable, advantage shoulit be taken of intervals in the line, if any. An understanding between artillery and infantry commanders should be had, so as to effect the movement to the best adrantage.
457. In adrancing the attack, advanced elements of the firing line or detachments in front of it should not open fire except in defense or to clear the foreground of the enemy. Fire on the hostile main position should not be opened until all or nearly all of the firing line can join in the fire.

## THE FIRE ATTACK.

458. At the first firing position the attack seeks to gain fire superiority. This may necessitate a steady, accurate fire for a long time. The object is to subdne the enemy's fire and keep it subdued so that the attacking troops may adrance from this point to a favorable place near the enemy from which the charge may be made. Hence, in the advance by rushes, sufficient riffes must be kept constantly in action to keep down the enemy's fire; this determines the size of the fraction rushing.
459. To advance without fire superiority against a determined defense would result in such losses as to bring the attack to a standstill or to make the apparent success barren of results.
460. Diminution of the enemy's fire and a prononnced loss in effectiveness are the surest signs that fire superiority has been gainerl and that a part of the firing line can advance.

461 . The men must be impressed with the fact that, having made a considerable advance under fire and having been checked, it is suicidal to turn back in daylight.

If they can advance no farther, they must intrench and hold on until the fall of darkness or a favorable turn in the sitnation develops.

Intrenching is resorted to only when necessary. Troops who have intrenehed themselves under fire are moved forward again with difieculty.
462. supports and reserves occupying intrenchments vacaterl by the firing line should improve them, but they must not be held back or diverted from their true missions on this account.
463. Paragraphs 309 to 317 , inclusive, deal more in detail with the conduct of the fire attack.

## THE CHARGE.

464. Fire superiority heats down the enemy's fire, destroys his resistance and morale, and enables the attacking troons to close on him, but an actual or threatened occupation of his position is neerled to drive him out and defeat him.

The psychological moment for the charge can not be determined far in advance. The tactical instinct of the responsible officer must decide.
465. The defenders, if subjugated by the fire attack, will frequently leare before the charge begins. On the other hand, it may be necessary to carry the fire attack close to the position and follow it up with a short dash and a bayonet combat. Hence the distance over which the charge may be made will vary between wide limits. It may be from 25 to 400 yards.

The charge shonld be made at the earliest moment that promises success; otherwise the full adrantage of victory will be lost.
466. The commander of the attacking line should indicate his approval, or give the order, before the charge is made. Subordinate commanders, usually hattalion commanders, whose troops are ready to charge signal that fact to the commander. It may be necessary for them to wait until other battalions or other parts of the line are ready or until the necessary reserves arrive.

At the signal for the charge the firing line and near-by sunports and reserves rush forward. See paragraphs 318 and 319.

The charge is made simultaneonsly, if possible, by all the mits participating therein, but, once committed to the assault, battalions slould be pushed with the utmost vigor and no restraint placed on the ardor of charging troops by an attempt to maintain alignment.

46\%. Before ordering the charge the commander should see that enough troops are on hand to make it a success. Local reserves joining the firing line in time to participate in the charge give it a strong impetus. Too dense a mass should be avoided.
468. The line should be strengthened by prolongation, if practicable, and remaining troops kept in formation for future use: but rather than that the attack should fail, the last formed body will be sent in, unless it is rery apparent that it can do no good.
469. To arrive in the hostile position with a very compact firing line and a few formed supports is sufficient for a victory, but an additional force kept well in hand for pursuit is of inestimable value.
470. A premature charge by a part of the line should be aroided, but if begun, the other parts of the line should join at once if there is any prospect of success. Under exceptional conditions a part of the line may be compelled to charge without authority from the rear. The intention to do so should be signaled to the rear.
471. Confidence in their ability to use the bayonet gives the assaulting troops the promise of success.
472. If the enemy has left the position when the charging troops reach it, the latter should onen a rapid fire upon the retreating enemy, if he is in sight. It is not advisable for the mixed and disordered units to follow him, except to adrance to a farorable firiug position or to cover the reorganization of others.
473. The nearest formed bodies accompanying or following the charge are sent instantly in pursuit. Under cover of these troops order is restored in the charging line. If the captured position is part of a general line or is an advanced post, it should be intrenched and occupied at once.

The exhaustion of officers and men must not cause the neglect of measures to meet a counterattack.
474. If the attack receives a temporary setback and it is intended to strengthen and continue it, officers will make every effort to stop the rearward movement and will reestablish the firing line in a corered position as close as possible to the enemy.
475. If the attack mist be abandoned, the rearward movement should continue with promptness until the troops reach a feature of the terrain that facilitates the task of checking and reorganizing them. The point selected should be so far to the rear as to prevent interference by the enemy before the troops are ready to resist. The withdrawal of the attacking troops
should be covered by the artillery and by reserves, if any are available.

See Night Operations.

## PURSUIT.

476. To reap the full fruits of victory a vigorous pursuit must be made. The natural inclination to be satisfied with a successful charge must be orercome. The enemy must be allowed no more time to reorganize than is positively unavoidable.
4.7. The part of the reserve that is still formed or is best under control is sent forward in pursuit and vigorously attacks the enemy's main body or covering detachments wherever found.

The artillery delivers a heary fire upon the retreating enemy; the disordered attacking troops secure the position, promptly re-form, and become a new reserve.
478. If the captured position is a section of the general line, the breach should be heavily occupied, made wider, and strongly secured by drawing on all reserves in the vicinity.
479. After the pursuit from the immediate battle field, pursuit by parallel roads is especially effective where large commands are concerned.
480. Artillery and cavalry are very effective in pursuit.

## ATTACK OF FORTIFICATIONS.

481. Few modifications enter into the problem of attacking fortifications. Such as are to be considered relate chiefly to the greater time and labor of adrancing, the more frequent use of darkness and the use of hand grenades to augment the fire.
482. If the enemy is strongly fortified and time permits, it may be advisable to wait and approach the charging point under cover of darkness. The necessary reconnaissance and arrangements should be made before dark. If the charge is not to be made at once, the troops intrench the adranced position, using sand bags if necessary. Before daylight the foreground should be cleared of obstacles.
483. If the distance is short and other conditions are favorable, the charge may be made without fire preparation. If made, it should be launched with spirit and suddenness at the break of day. (See Night Operations.)
484. In siege operations troops are usually advauced to the charging point by sapping. This method, however, presupposes
that an early victory is not necessary or that it is clearly inadvisable to attempt more direct methods.

## hOLDING ATTACK.

485. The holding attack must be vigorous enough to hold the enemy in position and must present a front strong enough to conceal the secondary nature of the attack.

The holding attack need have comparatively little strength in rear, but conceals the fact by a firing line not distinguishable from that of a decisive attack.
486. Supports and reserves are kept at short distances. Their strength is less if the object is merely to hold the enemy fast than if the object is, in addition, to compel him to use up reserves.
487. Holding attacks which may later develop into decisive attacks should be correspondingly strong in rear.
488. All feint attacks should employ dense firing lines. Their weakuess is in rear and is concealed.

## DEFENSE.

## POSITIONS AND INTRENCHMENTS.

489. The first requirement of a good position is a clear field of fire and view to the front and exposed flanks to a distance of 600 to 800 yards or more. The length of front should be suitable to the size of the command and the flanks should be secure. The position should have lateral communication and cover for supports and reserves. It should, be one which the enemy can not avoid, but must attack or give up his mission.

A position having all these advantages will rarely, if ever, be found. The one shonld be taken which conforms closest to the description.
490. The natural cover of the position should be fully utilized. In addition, it should be strengthened by fieldworks and obstacles.

The best protection is afforded by deep, narrow, inconspicuous trenches. If little time is available, as much as practicable must be done. That the fieldworks may not be needed should not cause their construction to be omitted, and the fact that
they have been constructed should not influence the action of a commander, if conditions are fonud to be other than expected.
491. When time and troops are available the preparations include the necessary communicating and cover trenches, head cover, bombproofs, etc. The fire trenches should be well supplied with ammunition.

The supports are placed close at hand in cover trenches when natural cover is not available.
492. Dummy trenches frequently cause the hostile artillery to waste time and ammunition and to divert its fire.
493. The location, extent, profile, garrison, etc., of fieldworks are matters to be decided by the infantry commanders. Officers must be able to choose ground and properly intrench it. (See Intrenchments.) :
494. In combat exercises, when it is impracticable to construct the trenches appropriate to the exercise, their trace may be outlined by bayonets, sticks, or other markers, and the responsible officers required to indicate the proffle selected, method and time of construction, garrisons, ete.

## DEPLOYMENT FOR DEFENSE.

495. The density of the whole deployment depends upon the expected severity of the action, the character of the enemy, the condition of the flanks, the field of fire, the terrain, and the available artificial or natural protection for the troops.
496. If exposed, the firing line should be as dense in defense as in attack. If the firing line is well intrenched and has a good field of fire, it may be made thinner.

Weaker supports are permissible. For the same number of troops the front occupied on the defensive may therefore be longer than on the offensire, the battalions placing more companies in the firing line.
497. If it is intended only to delay the enemy, a fairly strong deployment is sufficient, but if decisive results are desired, a change to the offensive must be contemplated and the corresponding strength in rear provided. This strength is in the reserve, which should be as large as the demands of the firing line and supports permit. Wien in a passive defense the reserve should be as strong as in the attack, unless the flanks are protected by other means.
498. Supports are posted as close to the firing line as practicable and reinforce the latter according to the principles explained in the attack. When natural cover is not sufficient for the purpose, communicating and cover trenches are constructed. If time does not permit their construction, it is better to begin the action with a very dense firing line and no immediate supports than to have supports greatly exposed in rear.
499. The reserve should be posted so as to be entirely free to act as a whole, according to the developments. The distance from firing line to reserve is generally greater than in the attack. By reason of such a location the reserve is best able to meet a hostile euveloping attack; it has a better position from which to make a counter attack; it is in a better position to cover a withdrawal and permit an orderly retreat.

The distance from firing line to reserve fncreases with the size of the reserve.
500. When the situation is no longer in doubt, the reserve should be held in rear of the flank which is most in danger or offers the best opportunity for counterattack. Usually the same flank best suits both purposes.

501 . In exceptional cases, on broad fronts, it may be necessary to detach a part of the reserve to protect the opposite tlank. This detachment should be the smallest consistent with its purely protective mission.
502. The commander assigns to subordinates the front to be occupied by them. These, in turn, subdivide the front among their next lower units in the firing line.
503. An extended position is so divided into sections that each has, if practicable, a field of fire naturally made distinct by the terrain.

Unfavorable and unimportant ground will ordinarily cause gaps to exist in the line.

504 . The size of the unit occupying each section depends upon the latter's natural strength, front, and importance. If practicable, battalions should be kept intact and assigned as units to sections or parts of sections.

505 . Where important dead space lies in front of one section, an adjoining section should be instructed to cover it with fire when necessary, or machine guns should be concealed for the like purpose.

506 . Advanced posts, or any other form of unnecessary dispersion, should be avoided.

507 . Unless the difficulty of moving the troops into the position be great, most of the troops of the firing line are held in rear of it until the infantry attack begins. The position itself is occupied by a small garrison only, with the necessary outguards or patrols in front.
508. Fire alone can not be depended upon to stop the attack. The troops must be determined to resort to the bayonet, if necessary.
509. If a night attack or close approach by the enemy is expected, troops in a prepared position should strengthen the outguards and firing line and construct as numerous and effectire obstacles as possible. Supports and local reserves should move close to the firing line and should, with the firing line, keep bayonets fixed. If practicable, the front should be illuminated, preferably from the flanks of the section.
510. Only short range fire is of any value in resisting night attacks. The bayonet is the chief reliance. (See Night Operations.)

## COUNTERATTACK.

511. The passive defense should be assumed only when circumstances force it. Only the offensive wins.
512. An active defense seeks a favorable decision. A favorable decision can not be expected without counterattack.
513. A passive defense in a position whose flanks are not protected by natural obstacles is generally out of the question.
514. Where the defense is assumed with a view to making a counterattack, the troops for the counterattack should be held in reserve until the time arrives for such attack. The defensive line should be held by as few troops as possible in order that the force for the offensive may be as large as possible.

The force for the counterattack should be held echeloned in rear of the flank which offers it the greatest advantage for the proposed attack.
515. The counterattack should be made vigorously and at the proper time. It will usually be made:

By launching the reserve against the enemy's flank when his attack is in full progress. This is the most effective form of counterattack.

Straight to the front by the firing line and supports after repulsing the enemy's attack and demoralizing him with pursuing fire.

Or, by the troops in rear of the firing line when the enems has reached the defensive position and is in disorder.
516. Minor counterattacks are sometimes necessary in order to drire the enemy from important positions gained by him.

## DELAYING ACTION.

517. When a position is taken merely to delay the enemy and to, withdraw before becoming closely engaged, the important considerations are:

The enemy should be forced to deploy early. The field of fire should therefore be good at distances from 500 to 1,200 yards or more; a good field of fire at close range is not necessary.

The ground in rear of the position should favor the withdrawal of the firing line by screening the troops from the enemy's yiew and fire as soon as the position is racated.
518. A thin firing line using much ammunition will generally answer the purpose. Supports are needed chiefly to protect the flanks.

The reserve should be posted well in rear to assist in the withdrawal of the firing line.
519. Artillery is especially valuable to a delaying force.

## MEETING ENGAGEMENTS.

520. Meeting engagements are characterized by the necessity for hasty recomnaissance, or the almost total absence of reconnaissance; by the necessity for rapid deployment, frequently under fire; and usually by the absence of trenches or other artificial cover. These conditions give further advantages to the offensive.

521 . The whole situation will usually indicate beforehand the proper general action to be taken on meeting the enemy.
522. Little fresh information can be expected. The boldness, initiative, and determination of the commander 'must be relied upon.
523. A meeting engagement affords an ideal opportunity to the commander who has intuition and quick decision and who is willing to take long chances. His opponent is likely to be overcautious.
524. The amount of information that the commander is warranted in awaiting before taking final action depends entirely upon his mission. One situation may demand a blind attack; another may demand rapid, partial deployment for attack, but careful and time-consuming reconnaissance before the attack is launched.
525. A great advantage accrues to the side which can deploy the faster. The adrantage of a close-order formation, favoring rapid deployment, becomes more pronounced with the size of the force.
526. The first troops to deploy will be able to attack with longer firing lines and weaker supports than are required in the ordinary case. But if the enemy succeeds in deploying a strong defensive line, the attack must be strengthened accordingly before it is wasted.
$\mathbf{5 2 7}$. If the situation warrants the adrance, the leading troops seek to deploy faster than the enemy, to reach his flanks, check his deployment, and get information. In any erent, they seek to corer the deployment of their own troops in rear-especially the artillery-and to seize important ground.
528. The commander of a long column which meets the enemy should be with the advance guard to receive information promptly and to reconuoiter. If he decides to fight, the adrance guard must hold the enemy while the commander formulates a plan of action, issues the necessary orders, and deploys the main body. Meantime, the column should be closing up, either in mass or to form line of columns, so that the deployment, when determined upon, may be made more promptly.

529 . The action of the adrance guard, prior to the receipt of urders, depends upon the situation. Whether to attack determinedly or only as a feint, or to assume the defensive, depends upon the strength of the adrance guard, the terrain, the character of the hostile force encountered, and the mission and intentions of the commander of the whole.
530. If the enemy is beforehand or more aggressive, or if the advance guard is too weak, it may be necessary to put elements of the main body into action as fast as they arrive, in order to check him. This method should be avoided; it prerents the formation and execution of a definite plan and compels piecemeal action. The best results are obtained when the main body is used as a whole.

## WITHDRAWAL FROM ACTION.

531. The withdrawal of a defeated force can generally be effected only at a heavy cost. When it is no longer possible to give the action a favorable turn and the necessity for withdrawal arises, every effort must be made to place distance and a rear guard between the enemy and the defeated troops.

532 . Artillery gives especially valuable assistance in the withdrawal: The long-range fire of machine guns should also be employed. Cavalry assists the withdrawal by charging the pursuing troops or by taking flank positions and using fire action.
533. If an intact reserve remains it should be placed in a covering position, preferably on a flank, to check the pursuit and thus enable the defeated troops to withdraw beyond reach of hostile fire.

The covering position of the reserve should be at some distance from the main action, but close enough to bring the withdrawing troops quickly under the protection of its fire. It should have a good field of fire at effective and long ranges and should facilitate its own safe and timely withdrawal.
534. If the general line is divided, by terrain or by organization, into two or more parts, the firing line of the part in the least danger from pursuit should be withdraẉu first. A continuous firing line, whose parts are dependent upon one another for fire support, should be withdrawn as a whole, retiring by echelon at the beginning of the withdrawal. Every effort musi be made to restore the organizations, regain control, and form column of march as soon as the troops are beyond the reach of hostile fire.

As fast as possible without delaying the march, companies, and the larger units should be re-formed, so that the command will again be well in hand.
535. The commauder of the whole, having given orders for withdrawal, should go to the rear, select a rendezvous point, and devote himself to the reorganization of his command.

The rendezvous point is selected with regard to the natural channels of movement approximately straight to the rear. It should be distant from the battle field and should facilitate the gathering and protection of the command.

## SUMMARY.

536. 537. Avoid combats that offer no chance of victory or other valuable results.
1. Make every effort for the success of the general plan and avoid spectacular plays that have no bearing on the general result.
2. Have a definite plan and carry it out vigorously. Do not vacillate.
3. Do not attempt complicated maneuvers.
4. Keep the command in hand; avoid undue extension and dispersion.
5. Study the ground and direct the adrance in such a way as to take advantage of all available corer and thereby diminish losses.
6. Never deploy uutil the purpose and the proper direction are known.
7. Deploy enough men for the immediate task in hand; hold out the rest and avoid undue haste in committing them to the action.
8. Flanks must be protected either by reserves, fortifications, or the terrain.
9. In a decisive action, gain and keep fire superiority.
10. Keep up reconnaissance.
11. Use the reserve, but not until needed or a very favorable opportunity for its use presents itself. Keep some reserve as long as practicable.
12. Do not hesitate to sacrifice the command if the result is worth the cost.
13. Spare the command all unnecessary hardship and exertion. 122

## MISCELLANEOUS.

## MACHINE GUNS.

$53 \%$. Machine guns must be considered as weapons of emergency. Their effectiveness combined with their mobility renders them of great value at critical, though infrequent, periods of an engagement.
538. When operating against infantry only, they can be used to a great extent throughout the combat as circumstances may indicate, but they are quickly rendered powerless by efficient field artillery and will promptly diaw artillery fire whenever they open. Hence their use in eagagements between large commands must be for short periods and at times when their great effectiveness will be most valuable.
539. Machine guns should be attached to the adrance guard. In meeting engagements they will be of great value in assisting their own advance, or in checking the adrance of the enemy, and will have considerable time to operate before hostile artillery fire can silence them.

Care must be taken not to leave them too long in action.
540. They are valuable to a rear guard which seeks to check a vigorous pursuit or to gain time.
541. In attack, if fire of position is practicable, they are of great value. In this case fire should not be opened by the machine guns until the attack is well advanced. At a critical period in the attack, such fire, if suddenly and unexpectedly opened, will greatly assist the adrancing line. The fire must be as heary as possible and must be continued until masked by friendly troops or until the hostile artillery finds the machine guns.
542. In the defense, machine guns should be used in the same general manner as described above for the attack. Concealment and patient waiting for critical moments aud exceptional opportunities are the special characteristics of the ma-chine-gun service in decisive actions.
543. As part of the reserve, machine guns have special importance. If they are with the troops told off to protect the flanks, and if they are well placed, they will often produce de-
cisive results against a hostile turning movement. They are especially qualified to cover a withdrawal or make a captured position secure.
544. Machine guns should not be assigned to the firing line of an attack. They should be so placed that fire directed upon them is not likely to fall upon the firing line.

545 . A skirmish line can not advance by walking or running when hostile machine guns have the correct range and are ready to fire. Machine-gun fire is not specially effective against troops lying on the ground or crawling.
546. When opposed by machine guns and without artillery to destroy them, infantry itself must silence them before it can advance.

An infantry command that must depend upon itself for protection against machine guns should concentrate a large number of rifles on each gun in turn and motil it has silenced it.

## AMMUNITION SUPPLY.

547. The method of supply of ammunition to the combat trains is explained in Field Service Regulations.

548 . The combat train is the immediate reserve supply of the battalion, and the major is responsible for its proper use. He will take measures to insure the maintenance of the prescribed allowance at all times.

In the absence of instructions, he will cause the train to march immediately in rear of his battalion, and, upon separating from it to enter an engagement; will cause the ammunition therein to be issued. When emptied, he will direct that the wagons proceed to the proper rendezvous to be refilled. Ordinarily a rendezrous is appointed for each brigade and the necessary number of wagons sent forward to it from the ammunition column.
549. When refilled, the combat wagons will rejoin their battalions, or, if the latter be engaged, will join or establish communication with the regimental reserve.
550. Company commanders are responsible that the belts of the men in their companies are kept filled at all times, except when the ammunition is being expended in action. In the firing line the ammanition of the dead and wounded should be secured whenever practicable.
551. Ammunition in the bandoleers will ordinarily be expended first. Thirty rounds in the right pocket section of the belt will be held as a reserve, to be expended only wher ordered by an officer.
552. When necessary to resupply the firing line, ammunition will be sent forward with reenforcements, generally from the regimental reserve.

Men will never be sent back from the firing line for ammunition. Men sent forward with ammunition remain with the firing line.
553. As soon as possible after an engagement the belts of the men and the combat wagons are resupplied to their normal capacities. Ammunition which can not be reloaded on combat wagons will be piled up in a converient place and left under guard.

## MOUNTED SCOUTS.

554. The mounted sconts should be thoronghly trained in patrolling and reconnaissance. They are used for communication with neighboring troops, for patrolling off the route of march, for march ontposts, outpost patrols, combat patrols, recounaissance ahead of columms, etc. Their further use is, in general, confined to escort and messenger duty. They should be freely used for all these purposes, but for these purposes only.
555. When infantry is acting alone, or when the cavalry of a mixed command has been sent to a distance, the mounted scouts are of special importance to covering detachments and should be used to make the reconnaissance which would otherwise fall to cavalry.
556. In reconnaissance, scouts should be used in preference to other troops as much as possible. When not needed for mounted duty, they should be employed for necessary dismounted patrolling.
557. Battalion staff officers should be specially trained in patrolling and reconnaissance work in order that they may be available when a mounted officer's patrol is required.

## NIGHT OPERATIONS.

558. By employing night operations troops make use of the cover of darkness to minimize losses from hostile fire or to
escape observation. Night operations may also be necessary for the purpose of gaining time. Control is difficult and confusion is frequently unavoidable.

It may be necessary to take advantage of darkness in order to assault from a point gained during the day, or to approach a point from which a daylight assault is to be made, or to effect both the approach and the assault.
559. Offensive and defensive night operations should be practiced frequently in order that troons may learn to cover ground in the dark and arrive at a destination quietly and in good order, and in order to train officers in the necessary preparation and reconuaissance.

Only simple and well-appointed formations should be employed.

Troops should be thoronghly trained in the necessary detailse. g., night patrolling, night marching, and communication at night.

560 . The ground to be traversed should be studied by daylight and, if practicable, at night. It should be cleared of hostile detachments before dark, and, if practicable, should be occupied by covering troops.

Orders must be formulated with great care and clearness. Each unit must be given a definite objective and direction, and care must be exercised to avoid collision between units.

Whenever contact with the enemy is anticipated, a distinctive badge should be worn by all.
561. Preparations must be made with secrecy. When the movement is started, and not until then, the officers and men should be acquainted with the general design, the composition of the whole force, and should be given such additional informa'tion as will insure cooperation and eliminate mistakes.

During the movement every precaution must be taken to keep secret the fact that troops are abroad.

Unfriendly guides must frequently be impressed. These should be secured against escape, outcry, or deceptlon.

Fire action should be avoided in offensive operations. In general, pieces should not be loaded. Men must be trained to rely upon the bayonet and to use it aggressively.
562. Long night marches should be made only over welldefined routes. March discipline must be rigidly enforced. The troops should be marched in as compact a formation as practicable, with the usual covering detachments. Advance and rear
guard distances should be greatly reduced. They are shortest when the mission is an offensive one. The connecting files are numerous.
563. A night advance made with a view to making an attack by day usually terminates with the hasty construction of intrenchments in the dark. Such an advance should be timed so as to allow an hour or more of darkness for intrenching.

An adrance that is to terminate in an assault at the break of day should be timed so that the troops will not arrive long before the assault is to be made; otherwise the advantage of partial surprise will be lost and the enemy will be allowed to reenforce the threatened point.
564. The night attack is ordinarily confined to small forces, or to minor engagements in a general battle, or to seizure of positions occupied by covering or adranced detachments. Decisive results are not often obtained.

Poorly disciplined and untrained troops are unfit for night attacks or for night operations demanding the exercise of skill and care.

Troops attacking at night can adrance close to the enemy in compact formations and without suffering loss from hostile artillery or infantry fire. The defender is ignorant of the strength or direction of the attack.

A force which makes a vigorous bayonet charge in the dark will often throw a much larger force into disorder.
565. Reconnaissance should be made to ascertain the position and strength of the enemy and to study the terrain to be traversed. Officers who are to participate in the attack should conduct this reconnaissance. Reconnaissance at night is especially valuable. Features that are distinguishable at night should be carefully noted, and their distances from the enemy, from the starting point of the troops, and from other important points should be made known.

Preparations should have in view as complete a surprise as possible. An attack once begun must be carried to its conclusion, even if the surprise is not as complete as was planned or anticipated.
566. The time of night at which the attack should be made depends upon the object sought. If a decisive attack is lntended, it will generally yield the best results if made just before daylight. If the object is merely to gain an intrenched position for further operations, an earlier hour is necessary in
order that the position gained may be intrenched under cover of darkness.

567 . The formation for attack must be simple. It should be carefully effected and the troops verified at a safe distance from the enemy. The attacking troops should be formed in compact lines and with strong supports at short distances. The reserve should be far enough in rear to avoid being drawn into the action until the commander so desires. Bayonets are fixed, pieces are not loaded.

Darkness causes fire to be wild and ineffective. The attacking troops should march steadily on the enemy without firing, but should be prepared and determined to fight vigorously with the bayonet.

In advancing to the attack the aim should be to get as close as possible to the enemy before being discovered, then to trust to the bayonet.

If the assault is successful, preparations must be made at once to repel a counterattack.
568. On the defense, preparations to resist night attacks should be made by daylight whenever such attacks are to be feared.

Obstacles placed in front of a defensive position are especially valuable to the defense at night. Many forms of obstacles which would give an attacker little concern in the daytime become serious hindrances at night.

After dark the foreground should be illuminated whenever practicable and strong patrols should be pushed to the front.

When it is learued that the enemy is approaching, the trenches are manned and the supports moved close to the firing line.

Supports fix bayonets, but do not load. Whenever practicable and necessary they should be used for counterattacks, preferably against a hostile flank.

The defender should open fire as soon as results may be expected. This fire may avert or postpone the bayonet combat, and it warns all supporting troops. It is not likely that fire alone can stop the attack. The defender must be resolved to fight with the bayonet.

Ordinarily fire will not be effective at ranges exceeding 50 yards.

A white rag around the muzzle of the riffe will assist in sighting the piece when the front sight is not visible.

See paragraphs 450, 482, 483, 509, 510.

## INFANTRY AGAINST CAVALRY.

569. A cavalry charge can accomplish little against infantry, even in inferior numbers, unless the latter are surprised, become panic-stricken, run away, or can not use their rifles.

570 . A charge from the front is easily checked by a welldirected and sustained fire.

If the charge is directed against the flank of the firing line, the supports, reserves, or machine guns should stop it. If this disposition is impracticable, part of the line must meet the charge by a timely change of front. If the flark company, or companies, in the firing line execute platoons right, the successive firing lines can ordinarily break a charge against the flank. If the cavalry line passes through the firing line, the latter will be little damaged if the men retain their presence of mind. They should be on the watch for succeeding cavalry lines and leare those that have passed through to friendly troops in rear.

5 51. Men standing are in the best position to meet a charge, but other considerations may compel them to meet it lying prone.
572. In a mêlée, the infantryman with his bayonet has at least an even chance with the cavalryman, but the main dependence of infantry is rifle fire. Any formation is suitable that permits the free use of the necessary number of rifles.

Ordinarily there will be no time to change or set sights. Fire at will at battle sight should be used, whatever the range may be. It will usually be unwise to open fire at long ranges.

573 . An infantry column that encomnters cavalry should deploy at once. If attacked from the head or rear of the column, and if time is pressing, it may form a succession of skirmish lines. Infantry, by deploying 50 or 100 yards in rear of an obstacle, may check cavalry and hold it under fire beyond effective pistol range.

In any situation, to try to escape the issue by running is the worst and most dangerous course the infantry can adopt.
574. In attacking dismounted cavalry, infantry should close rapidly and endeavor to prevent remounting. Infantry which adopts this course will not be seriously checked by delaying cavalry.

Every effort should be made to locate and open fire on the led horses.

## IfFANTRY AGAINST ARTILLERY.

575. A frontal attack against artillery has little cloancq of succeeding unless it can be started from cover at comparatively short range. Beyond short range, the frontal fire of infantry has little effect against the artillery personnel because of their protectire shields.

Machine gims, becanse their cone of fire is more compact, will have greater effect, but on the other hand they will have fewer opportumities and they are limited to fire attack ouly.

As a rule, one's own artillery is the best weapon against hostile artillery.

5\%6. Artillery attacked in fiank by infantry can be severely damaged. Oblique or flank fire will begin to have decisive effect when delivered at effective range from a point to one side of the artillery's line of fire aud distant from it by abont half the range. Artillery is better protected on the side of the caisson.
$57 \%$. Guns out of ammmition, but otherwise secure against infantry attack, may be immobilized by fire which will prevent their withdrawal, or by lucating and driving off their limbers. Or they may be kept out of action by fire which will prevent the receipt of ammmnition.

575 . Artillery when limbered is helpless against infantry fire. If caught at effective rapge while coming into action or while limbering, artillery can be severely punished by infantry fire.

In attacking artillery that is trying to escape, the wheel horses are the best targets.

## ARTILLERY SUPPORTS.

579. The purpose of the artillery smpport is to guard the artillery against surprise or attack.

Artillery on the march or in action is ordinarily so placed as to be amply protected by the infantry. Infantry always protects artillery in its neighborhood.

580 . The detail of a support is not necessary except when the artillery is separated from the main body or occupies a position in which its flanks are not protected.

The detail of a sperial support will be avoided whenever possible.
581. The formation of an artillery support depends upon circumstances. On the march it may often be necessary to provide advance, flank, and rear protection. The country must be thoroughly reconnoitered by patrols within long rifle range.
582. In action, the formation and location of the support must be such as to gain and give timely information of the enemy's approach and to offer actual resistance to the enemy beyond effective rifle range of the artillery's flanks. It should not be close enough to the artillery to suffer from tire directed at the artillery. In most cases a position somewhat to the flank and rear best fulfills these conditions.
583. The supprert cominander is charged only with the protection of the artillery. The tactical employment of each arm rests with its commander. The two should cooperate.

## INTRENCHMENTS.

(Plate V.)
584. Ordinarily, infantiy intrenches itself whenever it is rompelled to halt for a considerable time in the presence of the enemy.

Infantry charged with a resisting mission should intrench whenever there is any likelihood that the cover constructed will be of use.
585. Except in permanent fortifications or in fortifications prepared long in advance, the infantry plans and constructs the field works that it will occupy.

When performing their duties in this connection officers should bear in mind that profile and construction are simple matters compared with location and correct tactical use.
586. Intrenchments enable the commander to hold a position with the least possible number of men and to prolong his line or increase his reserve.

They are constructed with a view to giving cover which will diminish losses, but they must not be so built or placed as to interfere with the free use of the rifle. Fire effect is the first consideration.
587. The trace of a fire trench or of a system of fire trenches depends upon the ground and the proposed density of the entire firing line. The trenches are laid out in company lengths, if possible.

Adjoining trenches should afford each other mutual support. The flanks and important gaps in the line should be protected by fire trenches echeloned in rear. (Fig. 6).
588. To locate the trace, lie on the ground at intervals and select the best field of fire consistent with the requirements of the situation.

A profile should be selected which will permit the fire to sweep the foreground, require the minimum of labor and time, and permit the best concealment. No fixed type can be prescribed. The type must be selected with due regard to the terrain, the enemy, time, tools, materiais, soil, etc.
589. Hasty cover. With the intrenching tool, troons can quickly throw up a low parapet about 3 feet thick which will furnish considerable cover against rifle fire, but scarcely any against shrapnel. Such corer is frequently of value to an attack that is temporarily unable to continue. In time, and particularly at night, it may be developed into a deep fire or cover trench.
590. Fire trenches should be placed and constructed so as to give a good field of fire and to give the troops protection behind a vertical wall, preferably with some head or overhead cover. They should be concealed or inconspicuous in order to aroid artillery fire or to decrease its accuracy. They should hare natural or artificial communication with their supports, but in establishing the trace this is a secondary consideration.

The simplest form of fire trench is deep and narrow and has a flat, concealed parapet. (Fig. 1.) In ordinary soil, and on a basis of tro reliefs and tasks of 5 feet, it can be constructed in about two hours with intrenching tools.

This trench affords fair cover for troops subjected to fire, but not actually firing. When it is probable that time will permit elaboration, the simple trench should be planned with a view to developing it ultimately into a more complete form. (Figs. 2 and 3.) Derices should be added to increase the security of the trench and the comfort of the men.

Where the excavated earth is easily removed, a fire trench without parapet may be the one best suited to the soil and other conditions affecting the choice of profile. (Fig. 4.) The enemy's infantry, as well as his artillery, will generally have great difficulty in seeing this type of trench.

In very difficult soil, if the time is short, it may be necessary to dig a wider, shallower trench with a higher parapet.


Passible arrongement of 2 Bns. of int. intrenched /Regimental Reserve of I Bn. not shown) A Firing trenches.
B Cover trenches
C Communicating trench: D same traversed: E conmunicating way
F Closed supporting point for flank protection
MG Pussible posstion for mactine guns, concealed trom front
Fig 6

Head cover, notches, and loop holes are of value to troops when firing, but many forms weaken and disclose the location of the parapet. Filled sandbags kept in the trench when the men are not firing may be thrown on the parapet to form notches or loopholes when the troops in the trench open fire and concealment of the trench is no longer necessary or possible.

By the use of observation stations the maximum rest and security is afforded the troops. Stations are best located in the angles of traverses or at the end of the trench.
591. Where the nature of the position makes it advisable to ronstruct traverses at regular intervals it is generally best to construct a section of trench for each squad, with trarerses between squads. (Fig. 5.)
532. Cover trenches are placed as closely as practicable to their respective fire trenches. Where natural cover is not arailable, each fire trench shonld have artificial corer in rear for its support-either a cover trench of its own or one in common with an adjoining fire trench.

The cover trench is simple and rectangular in profile. Concealment is indispensable. It is generally concealed by the contonr of the gronnd or hy natural features, but to guard against hostile searching fire orerhead cover is frequently advisable.

Corer trenches should be made as comfortable as possible. It will often be advisable to make them extensive enough to provide cooking and resting facilities for the garrisons of the corresponding fire trenches.
593. Communicating trenches are frequently necess:1ry in order to connect fire trenches with their corresponding cures trenches where natural, covered commmication is impracticable. They are generally rectangular in profile, deep, and narrow. They are traversed or zigzagged to escape enfilade.

Returns or pockets should be provided for use as latrines, storerooms, dressing stations, passing points for trons, etc.

Cover from observation while passing throngh the trench may insure against loss as effectively as material cover from the enemy's fire.

Communicating ways, naturally or artificially screened from the enemr's riew, sometimes provide sufficient cover for the passage of troops.
594. Dummy trenches frequently draw the enemy's atteution and fire and thus protect the true fire trench.

Any type is suitable which presents to the enemy the appearance of a true trench imperfectly concealed.
595. When it is uncertain whether time will permit the completion of all the work planned, work should proceed with due regard to the order of importance of the several operations. Ordinarily the order of importance will be:

1. Clearing foreground to improve the field of fire and construction of fire trench.
2. Head or overhead cover; concealment.
3. Placing obstacles and recording ranges.
4. Corer trenches for supports and local reserves.
5. Communicating trenches.
6. Widening and deepening of trenches; interior conveniences.

See paragraph $\overline{6} 63$.

## MINOR WARFARE.

596. Minor warfare embraces both regular and irregular operations.

Regular operations consist of minor actions inrolving small bodies of trained and organized troops on both sides.

The tactics employed are in general those prescribed for the smaller units.

59\%. Irregular operations consist of actions against unorganized or partially organized forces, acting in independent or semi-independent bodies. Such bodies have little or only crude training and are under nominal and loose leadership and control. They assemble, roam about, and disperse at will. They endearor to win by stealth or by force of superior numbers, employing ambuscades, sudden dashes or rushes, and hand-tohand fighting.

Troops operating against such an enemy usually do so in small umits, such as platoons, detachments, or companies, and the tactics employed must be adapted to meet the requirements of the situation. Frequently the enemy's own methods may be employed to allvantage.

In general, such operations should not be undertaken hastily; every preparation should be made to strike suddenly and to inflict the maximum pmonshment.
598. In general, the service of information will be insuffcient; adoquate recomnaissance will rarely be practicable.

March and bivouac formations must be such as to admit of rapid deployment and fire action in any direction.

599 . In the open country, where surprise is not probable, troops may be marched in column of squads preceded, within sight, by a squad as an advance party.
600. In close country, where surprise is possible, the troops must be held in a close formation. The use of flank patrols becomes difficult. Occasionally, an advance party-never less than a squad-may be sent out. In general, however, such a party accomplishes little, since an enemy intent on surprise will permit it to pass unmolested and will fall upon the main body.

Under such conditions, especially when the road or trail is narrow, the column of twos or files is a convenient formation, the officers placing themselres in the column so as to divide it into nearly equal parts. If rushed from a flank, such a column will be in readiness to face and fire toward either or both flank, the ranks being back to back; if rushed from the front, the head of the column may be deployed, the rest of the column closing up to support it and to protect its flanks and rear. In any event, the men should be taught to take some form of a closed back-to-back formation.
601. The column may often be broken into two or more approximately equal detachments separated on the march by distances of 50 to 100 yards. As a rule the detachments should not consist of Jess than 25 men each. With this arrangement of the column, it will rarely be possible for an enemy to close simultaneously with all of the detachments, one or more being left unengaged and under control to support those engaged or to inflict serere punishment upon the enemy when he is repulsed.

602 . The site for camp or birouac should be selected with special reference to economical and effective protection against surprise. Double sentinels are posted on the avenues of approach and the troons sleep in readiness for instant action. When practicable, troops should be instructed in advance as to what they are to do in case of attack at night.
603. Night operations are frequently advisable. With the small forces employed, control is not difficult. Irregular troops rarely provide proper camp protection, and they may frequently be surprised and severely punished by a properly conducted night march and attack.

## PATROLS.

604. The following paragraphs on patrols are placed here for convenience. They relate in particular to the conduct of the patrol and its leader, and apply to patrols employed in corering detachments as well as in combat reconnaissance.
605. A patrol is a detachment sent out from a command to gain information of the country or of the enemy, or to prevent the enemy from gaining information. In special cases patrols may be given missions other than these.
606. The commander must have clearly in mind the purpose for which the patrol is to be used in order that he may determine its proper strength, select its leader, and give the latter proper instructions.

In general, a patrol should be sent ont for one definite purpose onls.
607. The strength of a patrol raries from two or three men to a company. It should be strong enough to accomplish its purpose, and no stronger.

If the purpose is to gain information only, a small patrol is better than a large one. The former conceals itself more readily and mores less conspicuously. For observing from some point in plain view of the command or for risiting or reconnoitering between outguards two men are sufficient.

If messages are to be sent back, the patrol must be strong enough to furnish the probable number of messengers without reducing the patrol to less than two men. If hostile patrols are likely to be met and must be driven off, the patrol must be strong.

In friendly territory, a weaker patrol may be used than would be used for the corresponding purpose in hostile territory.

608 . The character of the leader selected for the patrol depends upon the importance of the work in hand.

For patrolling between the groups or along the lines of an outpost, or for the simpler patrols sent out from a covering detachment, the average soldier will be a competent leader.
609. For a patrol sent out to gain information, or for a distant patrol sent out from a covering detachment, the leader must be specially selected. He must be able to corer large areas with few men; he must be able to estimate the strength of hostile forces, to report intelligently as to their dispositions. to read indications, and to judge as to the importance of the
information gained. He must possess endurance, courage, and good judgment.

His instructions should be full and clear. He must be made to understand exactly what is required of him, where to go and when to return. He should be given such information of the enemy and country as may be of value to him. He should be informed as to the general location of his own forces, particularly of those with whom he may come in contact. If possible, he should be given a map of the comntry he is to traverse, and in many cases his ronte may be sirecified.

Besides his arms and ammunition, the patrol leader should have a compass, a watch, a pencil, a note book, and. when practicable, field message blanks and a map of the country.

The patrol leader assembles the men detailed for the patrol. He inspects their arms and ammunition and satisfies himself that they are in suitable condition for the duty. He sees that none has any papers, mans, etc., that would be of value to the enemy if captured. He sees that their acconterments do not glisten or rattle when they more. Ife then repeats his instructions to the patrol and assures himself that every man understands them. He explains the signals to be used and satisfies himself that they are understood. IIe designates a man to take his place should he be disabled.
610. The formation and movements of the patrol must be regulated so as to render probable the escape of at least one man should the patrol encounter a superior force. The formation will depend mon the nature of the ground traversed and the cover afforded. The leatier must adopt the formation and measures best suited to the accomplishment of his object.

In general, it should have the formation of a main body with adrance, rear, and thank guards, though each be represented only by a single man.
611. The distances separating the members of the patrol vary according to the gromid. If too close together, they see no more than one man; if too widely separated they are likely to be lost to the control of the leader.

With a patrol of four or five men the distances may vary from 25 to 50 yards; with a larger patrol they may be as great as 100 yards.

At times a column of files, separated by the distances prescribed, is a satisfactory formation.
612. The comntry must be carefully observed as the patrol advances. In passing over a hill, the country beyond should first be observed by one man; houses, inclosures, etc., should be approached in a similar manuer or aroided entirely; woods should generally be reconnoitered in a thin skirmish line.
613. The strength and composition of hostile troops must be observed. If they can not be counted, their strength may be estimated by the length of time a column consumes in passing a given point, or by the area covered if in camp.

Patrol leaders should know, if practicable, the uniforms, guidons, etc., of the enemy, as it will assist in determining the class of troops seen when no other means for doing so are a railable.

Insignia from the enemy's uniforms, picked up by patrols, often convey raluable information by indicating what troops are in the ricinity.

6 14. Patrols avoid fighting, except in self-defense or in order to prevent the enemy's patrols from gaining raluable information, or when necessary in order to accomplish their mission. In such cases, a patrol shonld fight resolutely even though inferior in numbers.

615 . Information gained by patrols is generally of no value unless received in time to be of use to the commander. Patrol leaders must therefore send back information of importance as soon as it is gained unless the patrol itself is to return at once.
616. If written, messages should state the place, date, hour, and minute of their dispatch. The information contained in them should be clearly and concisely expressed. They should be signed by the patrol leader.

The authorized message book shonld be ased and the form therein adhered to.
617. If the message be an oral one, the patrol leader should require the messenger to repeat it before starting back. In general, an oral message should cover but one point. Except when there is little chance of error in transmission, messages should be written.
618. When in friendly territory and not very far from friendly troops, one messenger is sufficient unless the message is very important. In hostile territory, either two men should go together or the message should be sent in duplicate by different routes.
619. Whether the information gained is of sufficient importance to be reported at once or may await the return of the patrol is a question which must be decided in each case. In case of reasonable doubt, it is generally better to send the report promptly. If the patrol leader has received proper instructions before starting out and has the requisite ability to lead a patrol, he can generally decide such questions satisfactorily as they arise.
620. Infantry patrols are generally used for work within 2 miles of supporting troops, but cases arise where they must go to greater distances.
621. Patrols composed of mounted scouts are conducted like cavalry patrols and should be trained in accordance with the Cavalry Drill Regulations.

For distant patrolling, a mounted patrol under an officer should be used.
622. For controlling the movements of the patrol, the leader should, when necessary, make use of the arm signals prescribed in these regulations.

On account of the short distances separating them, ordinary communication between members of the patrol is best effected quietly by word of month.

When a member of a patrol is sent to a distant point, communication may be effected by means of simple, prearranged signals.

When practicable, the patrol leader may communicate with the main body by means of visual signaling.

## Part III.-MARCHES AND CAMPS.

## MARCHES.

## TRAINING AND DISCIPLINE.

623. Marching constitutes the principal occupation of troops in campaign and is one of the heaviest canses of loss. This loss may be materially reduced by proper training and by the proper conduct of the march.
624. The training of infantry should consist of systematic physical exercises to develop the general physique and of actual marching to accustom men to the fatigue of bearing arms and equipment.

Before mobilization troops should be kept in good physical condition and so practiced as to teach them thoroughly the principles of marching. At the first opportunity after mobilization the men should be hardened to cover long distances without loss.
625. With new or untrained troops, the process of hardening the men to this work must be gradual. Immediately after being mustered into the service the physical exercises and marching should be begun. Ten-minute periols of vigorous settingup exercises should be given three times a day to loosen and develop the muscles. One march should be made each day with full equipment, begimning with a distance of 2 or 3 miles and increasing the distance daily as the troops become hardened, until a full day's march under full equipment may be made withont exhanstion.
626. A long march should not be made with untrained troops. If a long distance must be covered in a few days, the first march should be short, the length being increased each succeeding day.
627. Special attention should be paid to the fitting of shoes and the care of feet. Shoes should not be too wide or too
short. Sores and blisters on the feet should be promptly dressed during halts. At the end of the march feet should be bathed and dressed; the socks and, if practicable, the shoes should be changed.
628. The drinking of water on the march should be avoided. The thirst should be thoroughly quenched before starting on the march and after arrival in camp. On the march the use of water should, in general, be confined to gargling the mouth and throat or to an occasional small drink at most.
629. Except for urgent reasons, marches should not begin before an hour after daylight, but if the distance to be corered necessitates either breaking camp before daylight or making camp after dark, it is better to do the former.

Night marching should be avoided when possible.
630. A halt of 15 minutes should be made after the first half or three-qnarters of an hour of marching; thereafter a halt of 10 minutes is made in each hour. The number and length of halts may be varied, according to the weather, the condition of the roads, and the equipment carried by the men. When the day's march is long a halt of an hour should be made at noon and the men allowed to eat.
631. The rate of march is regulated by the commander of the leading company of each regiment, or, if the battalions be separated by greater than normal distances, by the commander of the leading company of each battalion. He should maintain a uniform rate, minfluenced by the movements of troops or mounted men in front of him.

The position of companies in the battalion and of battalions in the regiment is ordinarily changed daily so that each in turn leads.
632. The marching efficiency of an organization is judged by the amount of straggling and elongation and the condition of the men at the end of the march.

An officer of each company marches in its rear to prevent undue elongation and straggling.

When necessary for a man to fall out on account of sickness, he should be given a permit to do so. This is presented to the surgeon, who will admit him to the ambulance, have him wait for the trains, or follow and rejoin his company at the first halt.
633. Special attention should be paid to the rate of march. It is greater for trained than for untrained troops; for small commands than for large ones; for lightly burdened than for
heavily burdened troops. It is greater during cool than during hot weather. With trained troops, in commands of a regiment or less, marching over average roads, the rate should be from $2 \frac{3}{4}$ to 3 miles per hour. With larger commands carrying full equipment, the rate will be from 2 to $2 \frac{1}{2}$ miles per hour.

634 . The marching capacity of trained infantry in small commands is from 20 to 25 miles per day. This distance will decrease as the size of the command increases. For a complete division the distance can seldom exceed $12 \frac{1}{2}$ miles per day muless the division camps in column.

6:55. In large commands the marching capacity of troops is greatly rednced by faulty march orders and poor march discipline.

The march order should contain such instructions as will enable the troons to take their proper places in colnmn promptly. Delay or confusion in doing so should be investigated. On the other hand, organization commanders should be required to time their movements so that the troops will not be formed sooner than necessary.

The halts and starts of the mits of a column should be regulated by the watch and be simultaneons.
(losing $\mathrm{n}_{\mathrm{p}}$ Anring a halt, or changing gait to gain or lose distance should be prohibited.

Quartermaster sergemts, cooks, artificers, and company clerts march with the field train, under command of the supply officer in charge of the train.

## PROTECTION OF THE MARCH.

## General Considerations.

636. A column on the march in the vicinity of the enemy is covered by detachments called "advance guards," "rear guards," or "flank guards." The object of these covering detachments is to facilitate the advance of the main body and to protect it from surprise or observation.

They facilitate the advance of the main body by promptly driving off small bodies of the enemy who seek to harass or delay it; by removing obstacles from the line of advance, by repairing roads, bridges, etc., thus enabling the main body to advance uninterruptedly in convenient marching formations.

They protect the main body by preventing the enemy from firing into it when in close formation; by holding the enemy and enabling the main body to deploy before coming under effective fire; by preventing its size and conditiou from being observed
by the enemy ; and, in retreat, by gaining time for it to make its escape or to reorganize its forces.
637. Tactical units should not be broken in making details for covering detachments.
638. The march order of the whole command should explain the situation, and, among other things, detail the commander and troops for each covering detachment. It should specify the route to be taken and the distance to be maintained between the main body and its covering detachments. It should order such reconnaissance as the commander specially desires to have made.

The order of the commander of a covering detachment should clearly explain the situation to subordinates, assign the troops to the subdivisions, prescribe their distances, and order such special recomnaissance as may be deemed necessary in the beginning.

An advance or flank guard commander marches well to the front and, from time to time, orders such additional reconnaissance or makes such changes in his dispositions as the circumstances of the case demand.

## Advance Guards.

639. An advance guard is a detachment of the main body which precedes and covers it on the march.
640. The advance guard commander is responsible for its formation and conduct. He should bear in mind that its purpose is to facilitate and protect the march of the main body. Its own security must be effected by proper dispositions and recomnaissance, not by timid or cautions advance. It must advance at normal gait and search aggressively for information of the enemy. Its action when the enemy attempts to block it with a large force depends upon the situation and plaus of the commander of the troops.

641 . The strength of the advance guard varies from onetwentieth to one-third of the main body, depending upon the size of the main body and the service expected of the advance guard.
642. The formation of the adrance guard must be such that the enemy will be met first by a patrol, then in turn by one or more larger detachments, each capable of holding the enemy until the next in rear has time to deploy before coming under effective fire.
643. Generally an advance guard conslsting of a battalion or more is divided primarily into the reserve and the support.

When the adrance guard consists of less than a battalion, the reserve is generally omitted.
644. In an advance guard consisting of two battalions or less, the reserve and support, if both are used, are approximately equal; in larger adrance guards, the reserve is approximately two-thirds of the whole detachment.

In an advance guard consisting of one battalion, the machine guns, if any, form part of the reserve. In an advance guard consisting of two or more battalions, the machine guns form part of the support.
645. The support sends forward an advance party. The advance party, in turn, sends a patrol, called a point, still farther to the front. Patrols are sent out to the flanks when necessary. When the distance between parts of the adrance gnard or the nature of the country is such as to make direct communication difticult, connecting files march between the subdivisions to keep up communication. Each element of the column sends the necessary connecting files to its front.
646. A battalion acting as an adrance guard should be formed about as follows: The reserve, two companies; the support, two companies; the advance party, three to eight squads (about a half company), depending upon the strength of the companies and the recomaissance to be made; the point, a noncommissioned officer and three or four men. Or the reserve may be omitted. In such case the advance party will consist of one company preceded by a strong point. The remaining companies form the support.

647 . The distances separating the parts of an advance guard vary according to the mission of the whole force, the size of the advance guard, the proximity and character of the enemy, the nature of the country, etc. They increase as the strength of the main boty increases; they are less when operating in rolling, broken country than in open country; when in pursuit of a defeated enemy than against in aggressive foe; when operating against caralry than when against infantry.

If there be a mounted point, it should precede the dismounted point by 250 to 600 yards. The adsance party may be stronger when there is a mounted point in front. The infantry maintains its gait without reference to the mounted point, the latter regulating its march on the former.
648. To afford protection to an infantry column, the country must be observed on each side of the road as far as the terrain
affords positions for effective rifie fire upon the column. If the country that it is necessary to observe be open to view from the road, reconnaissance is not necessary.
649. The advance guard is respousible for the necessary reconnaissance of the country on both sides of the line of march.

Special recomnaissance may be directed by the commander of the troops, or cavalry may be reconnoitering at considerable distances to the front and flanks, but this does not relieve the advance guard from the duty of local recomnaissance.
650. This recomaissance is effected by patrols sent out by the leading subdivisions of the adrance guard. In a large advance guard the support commander orders the necessary recommaissance.

Patrols should be sent to the flanks when necessary to reconnoiter a specified locality and should rejoin the columu and their proper subdivision as soon as practicable. When the advance party is strong enongh, the patrols should be sent out. from it. When depleted by the patrols, sent out, the advance party should be reenforced during a halt by men sent forward from the support. If it be impracticable to send patrols from the advance party, they will be sent from the support.

Where the comutry is generally open to view, but localities in it might conceal an enemy of some size, reconnaissance is necessary. Where the road is exposed to fire and the view is restricted, a patrol should be sent to examine the country in the direction from which danger threatens. The object may be accomplished by sending patrols to observe from prominent points. When the ground permits and the necessity exists, patrols may be sent to march abreast of the column at distances which permit them to see important features not visible from the road.

Mounted scouts or civalry, when available, shonld be used for flank patrols.
651. Cases may arise where the best means of corering the head and flanks of the column will be by a line of skirmishers extending for several hundred yards to buth sides of the road, and deployed at intervals of from 10 to 50 yards. A column may thus protect itself when passing throngh country covered with high corn or similar vegetation. In such case, the vegetation forms a natural protection from rifle fire beyond very short ranges.
652. Fixed rules for the strength, formation, or conduct of advance guards can not be given. Each case must be treated to meet conditions as they exist. That solution is generally the
best which, with the fewest men and unbroken units, ampis protects the column and facilitates the advance.

## Rear Guards.

653. A rear guard is a detachment detailed to protect the main body from attack in rear. In a retreat, it checks pursuit and enables the maiu body to increase the distance between it and the enemy and to re-form if disorganized.

The general formation is that of an advance guard reversed.
654 . Its commander should take advantage of every favorable opportunity to delay the pursuers by obstructing the road or by taking up specially favorable positions from which to force the enemy to deploy. In this latter case care must be taken not to become so closely engaged as to render withdrawal unnecessarily difficult. The position taken shouli be selected with reference to ease of withdrawal and ability to bring the enemy under fire at long range.
655. In large commands artillery and cavalry form a very important part of the rear guard.

## Flank Guards.

656. A flank guard is a detacliment detailed to corer the flank of a column marching past, or across the front of, an enemy. It may be placed in position to protect the passage, or it may be so marched as to cover the passage.

65\%. The object of the tlank ginirt is to hold the enemy in check long enough to enable the wain body to pass, or, like the advance guard, to emable the main body to deploy.

Like all other detachments, it should be no larger than is necessary, and should not be detailed except when its protection is required.
658. When a tlank guard consists of a regiment or less, its distance from the main body should not exceed a mile and a half. Practicable commmication must exist between it and the main body.
659. The flank guard is marched as a separate command: that is, with advance or rear guards or both, as circumstances demand, and with patrolling on the exposed flank.
660. At times it may be necessary for an adrance-guard commander to send out large reconnoitering parties which temporarily assume the character and duties of a Hank guard. Such parties should be given specific order's as to when and where they are to rejoin the columa.

## CAMPS.

## SANITATION.

661. If the area of the available ground is sufficient and suitable, the camp of the battalion or regiment shonld conform to the plates published in the Field Service Regulations. Under similar favorable conditions, the brigade may camp in column or in line of columns. In the latter formation the interval between regiments should be about 50 yards. When the camp site has a restricted area, intervals and distances are reduced.

Under service conditions, camp sites that will permit the encampment of regiments and brigades as above indicated will not often be available and regularity must be sacrificed.
662. In large commands the halt order should assign camp sites to the next smaller commands, and the commanders of the latter should locate their respective commands to the best advantage on the area assigned them.

## The Selection of Camp Sites.

663. In campaign, tactical necessity may leave little choice in the selection of (amp) sites, but under any conditions the requireurents of sanitation should be given every consideration consistent with the tactical situation.
664. Great care should be exercised in selecting sites. In general, the following principles govern:

The site should be convenient to an abundant supply of pure water.

Good roads should lead to the camp. Interior communication throughout the camp should be easy. A camp near a main road is undesirable on account of dust and noise.

Wood, grass, forage, and supplies should be at hand or easily obtainable.

The ground should accommorlate the command without crowding and without compelling the troops of one unit to pass through the camp of another.

The site should be sufficiently high and rolling to drain off storm water readily, and, if the season be hot, to catch the breeze. In cold weather it should preferably have a southern exposure, with woods to the north to break the cold winds. In warm weather an eastern exposure, with the site moderately shaded by trees, is desirable.

The site should be dry. For this reason porous soil, covered with stout turf and underlaid by a sandy or gravelly subsoil, is best. A site on clay soil, or where the ground water approaches the surface, is damp, cold, and unhealthfin.

Alluvial soils, marshy gronnd, and ground near the base of hills, or near thick woods or dense vegetation, are undesirable as camp sites on account of dampness. Ravines and depressions are likely to be unduly warm and to have insufficient or undesirable air currents.

Proximity to marshes or stagnant water is undesirable on account of the dampness, mosquitoes, and the diseases which the latter transmit. The high banks of lakes or large streams often make desirable camp sites.

Dry beds of streams shonld be avoided; they are subject to sudden freshet.
$66 \%$. The occupation of old camp sites is dangerous, since these are often permeated by elements of disease which persist for considerable periods. Camp sites must be changed promptly when there is evideace of soil pollntion or when epidemic disease threatens, but the need for frequent changes on this account may be a reflection on the sanitary administration of the camp.

A change of camp site is often desirable in order to secure a change of surroundings and to abandou areas which have become dusty and cut up.

## Water Supply.

666. Immediately on making camp a guard should be placed over the water supply. If the water be obtained from a stream, places should be designated for drawing water (1) for drinking and cooking, (2) for watering aniuals, (3) for bathing and
wasling clothing. The first named should be drawn farthest up the stream; the others, in the order named, downstream.

If the stream be small, the water supply may be increased by building a dam. Small springs may be dug out and each lined with a gabion, or a barrel or box with both ends removed, or with stones, the space between the lining and the earth being filled with puddled clay. A rim of clay should be built to keep out surface drainage. The same method may be used near swamps, streams, or lakes to increase or clarify the water supply.

66\%. Water that is not known to be pure should be boiled 20 minutes; it should then be cooled and aerated by being poured repeatedly from one clean ontainer to another, or it may be purified by approved apparatus supplied for the purpose.
668. Arrangements should be made for men to draw water from the authorized receptacles by means of a spigot or other similar arrangement. The dipping of water from the receptaates, or the use of a common drinking cup, should be prohibited:

## 'Kitchens.

669. Camp kettles can be hung on a support consisting of a green pole lying in the crotches of two upright posts of the same character.

A anrow trench for the fire, about 1 foot deep, dug under the pole, not only protects the fire from the wind but saves fuel. A still greater economy of fuel can be effected by digging a similar trench in the direction of the wind anc. slightly narrower than the diameter of the kettles. The kettles are then placed on the trench and the space between the kettles filled in with stones, clay, etc., leaving the flue running beneath the kettles. The draft can be improved by building a chimney of stones, clay, etc., at the leeward end of the flue.

Four such trenches radiating from a common central chimney will give one flue for use whatever may be the direction of the wind.

A slight slope of the flue, from the chimney down, provides for drainage and improves the draft.

670 . The lack of portaple ovens can be met by ovens constructed of stone and covered with earth to better retain the heit. If no stone is available, an empty barrel, with one head
out, is laid on its side, corered with wet clay to a depth of 6 or more inches and then with a layer of dry earth equally thick. A tlue is constructed with the clay above the closed end of the barrel, which is then burned out with a hot fire. This leaves a baked clay covering for the oven.

A recess can be similarly constructed with boards or even brushwood, supported on a horizontal pole resting. on upright posts, corered and burnt out as in the case of the barrel.

When clay banks are available, an oren may be excavated therein and used at once.

To bake in such ovens, first heat them and then close flues and ends.
671. Food must be protected from flies, dust, and sun. Facilities must be provided for cleaning and scalding the mess equipment of the men. Kitchens and the ground around them must be kent scrupulously clean.
672. Solid refuse should be promptly burned, either in the kitchen fire or in an improvised crematory.
673. In temporary camps, if the soil is porous, liquid refuse from the kitchens may be strained through gunny sacking into seepage pits dug near the kitchen. Flies must not have access to these pits. Boards or poles, covered with brush or grass and a layer of earth may be used for this purpose. The strainers should also be protected from flies. Pits of this kind. dug in clayey soil, will not operate successfully. All pits should be filled with earth before marching.

## Disposal of Excreta.

674. Immediately on arriving in camp sinks should be dug. This is a matter of fundamental sanitary importance, since the most serious epidemics of camp diseases are spread from human excreta.

One sink is usually provided for each company and one for the oflicers of each battalion. Those for the men are invariably located on the side of camp opposite the kitchens. All sinks should be so placed that they can not pollute the water supply or camp site as a result of drainage or orerflow. To insure this, their location and their distance from camp may be raried.

When camp is made for a single night, shallow trenches, 12 inches deep and 15 to 18 inches wide, which the men may straddle, will suffice.

In more permanent camps, the trenches shonld be abont 2 feet wide, 6 feet deep, and 15 feet long. They should be provided with seats and back rests made of poles, and should be screened by brush or old tent flys.
675. In cold weather the contents of sinks should be covered once daily with quicklime, ashes, or dry earth. When filled to within 2 feet of the top, sinks shonld be discontinued and filled in.

Open pits are dangerons during the fly season. Howerer, the danger may be greatly reduced by covering the excreta with earth or by a thorough daily burning of the entire area of the trench. Combustible sweepings or straw, saturated with oil, may be used for this purpose.

In lly season, trenches may be closed with seats corered down to the ground with muslin and supplied with self-closing lids. Urinal tronghs, made of muslin and coated with oil or paint, should clischarge into the trenches.
676. In permanent camps special sanitary facilities for the disposal of excreta will ordinarily be provided.

If necessary, urinal tubs may be placed in the company streets at night and removed at reveille. Their location should be plainly marked and thoroughly and frequently disinfected.

6\%\%. When troops bivonac for the night the necessity for extensive sanitary precantions is not great; however, shallow sink trenches should be dug to prevent general pollution of the vicinity. If the cooking be collective, shallow kitchen sinks should be dug. If the cooking be indiridual, the men should be required to build their fires on the leeward flank of the camp or bivouac.

Before marching, all trenches should be filled in.

## PROTECTION OF CAMP OR BIVOUAC.

## General Considerations.

678. The outpost is a covering detachment detailed to secure the camp or bivonac against surprise and to prevent an attack upon it before the troops can prepare to resist.

679 . The size and disposition of the outpost will depend upon many circumstances, such as the size of the whole command, the proximity of the enemy and the situation with respect to him, the nature of the terrain, etc.

A suitable strength may vary from a very small fraction to one-third of the whole force. For a single company in hivonac a few sentinels and patrols will suffice; for a large command a more elaborate outpost system must be provided. It should be no stronger than is consistent with reasonable security.

The most economical protection is furnished by keeping close contact with the enemy by means of ontpost patrols, in conjunction with resisting detachments on the avenues of approach.

The outpost should be composed of complete organizations.
680. In a brigade or smaller force on the march toward the enemy, the outpost is generally formed from the adrance guard, and is relieved the following day when the new advance guard crosses the line of outguards. In a retreat, the detail for outpost duty is generally made from the main body. The new outpost becomes the rear guard the following day.

681 . When, as in large forces, an advance and rear guard performs such duty for several days, the outpost, during this period, is furnished by the advance or rear guards.

When the command is small and stationary for several days, the outpost is relieved daily. In large commands, the outpost will, as a rule, be relieved at intervals of several days.

682 . The positions held by the subdivisions of the outpost should generally be prepared for defense, but conditions may render this unnecessary.

Troops on outpost keep concealed as much as is consistent with the proper performance of their duties; especially do they a void appearing on the sky line.

Outpost troops do not render honors.

## Distribution of Outpost Troops.

683. The outpost will generally be divided into three parts. These, in order from the main body, are the reserve, the line of supports, and the line of outguards.

The distances separating these parts, and their distance from the main body, will depend upon the object sought, the nature of the terrain, and the size of the command. There can be no uniformity in the distance between supports and reserve, nor between outguards and supports, even in the same outpost. The avenues of approach and the important features of the terrain will largely control their exact positions

The outpost of a small force should ordinarily hold the enemy beyond effective rifle range of the main body until the latter can deploy. For the same purpose the outpost of a large force should hold the enemy beyond artillery range.
684. The reserve constitutes the main body of the outpost and is held at some central poiut from which it can readily support the troops in front or hold a rallying position on which they may retire. The reserve may be omitted when the outpost consists of less than two companies.

The reserve may comprise one-fourth to two-thirds of the strength of the outpost.
685. The supports constitute a line of supporting and resisting detachments, varying in size from a half company to a hattalion. They furnish the line of outguards.

The supports are numbered consecutively from right to left. They are placed at the more important points on the outpost line, usually in the line on which resistance is to be made in case of attack.
686. As a general rule, roads exercise the greatest influence on the location of supports, and a support will generally be placed on or near a road. The section which it is to cover should be clearly defined by means of tangible lines on the gromid and shonld be such that the support is centrally located therein.
$68 \%$. The outguards constitute the line of small detachmeuts farthest to the front and nearest to the enemy. For convenience they are classified as pickets, sentry squads, and cossack posts. They are numbered consecutively from right to left in each support.
688. A picket is a group consisting of two or more squads, ordinarily not exceeding half a company, posted in the line of outguards to cover a given sector. It furnishes patrols and one or more sentinels, double sentinels, sentry squads, or cossack posts for observation.

Pickets are placed at the more important points in the line of outguards, such as road forks. The strength of each depends upon the number of small groups required to observe properly its sector.
689. A sentry squad is a squad posted in observation at an indicated point. It posts a double sentinel in observation, the remaining men resting near by and furnishing the reliefs of sentiuels. In some cases it may be required to furnish a patrol.
690. A cossack post consists of four men. It is an observation group similar to a sentry squad, but employs a single sentinel.
691. At night, it will sometimes be adrisable to place some of the outguards or their sentinels in a position different from that which they occupy in the daytime. In such case the ground should be carefully studied before dark and the change made at dusk. However, a change in the position of the outguard will be exceptional.
692. Sentine/s are generally used singly in daytime, but at night double sentinels will be required in most cases. Sentimels furnished by cossack posts or sentry squads are kept near their group. Those furnished by pickets may be as far as 100 yards awas.

Every sentinel should be able to communicate readily with the body to which he belongs.
693. Sentinel posts are numbered consecutirely from right to left in each outguard. Sentry squads and cossack posts furnished by pickets are counted as sentinel prosts.

694 . Instead of using outguards along the entire front of observation, part of this front may be coreret by patrols only. These should be used to corer such sections of the front as can be crossed by the enemy only with difficults and over which he is not likely to attempt a crossing after dark.

In daylight much of the local patrolling may be dispensed with if the country can be seen from the posts of the sentinels. Howerer, patrols should frequently be pushed well to the front unless the ground in that direction is exceptionally open.
695. Patrols or sentinels must be the first trocps which the enemy meets, and each body in rear must have time to prepare for the blow. These bodies cause as much delay as possible without sacrificing themselves, and gradualls retire to the line where the outpost is to make its resistance.
696. Patrols must be used to keep up connection between the parts of the outpost-except when, during daylight, certain fractions or groups are mutually visible. After dark this connection must be maintained throughout the outpost except where the larger subdivisions are prorided with wire communication.
697. In addition to ordinary outguards, the outpost commander may detail from the reserve one or more detached posts to corer roads or areas not in the general line assigned to the supports.

In like manner the commander of the whole force may order detached posts to be sent from the main body to cover important roads or localities not included in the outpost line.

The number and strength of detached posts are reduced to the absolnte needs of the situation.

## Establishing the Outpost.

698. The ontpost is posted as quickly as possible so that the troops can the sooner obtain rest. Until the leading outpost troops are able to assume their duties, temporary protection, known as the march outpost, is furnished by the nearest available troops.
699. The halt order of the commander, besides giving the necessary information and assigning camp sites to the parts of the command, details the troops to constitute the outpost, assigns a commander therefor, designates the general line to be occupied, and, when practicable, points out the position to be held in case of attack.
700. The outpost commander, upon receipt of this order, should issue the ontpost order with the least practicable delay. In large commands it may often be necessary to give the order from the map, but usually the outpost commander will have to make some preliminary recomnissance, mess he has an accurate and detailed map.

The order gives such available information of the situation as is necessary to the complete and proper guidance of subordinates; designates the troons to constitute the supports; assigns their location and the sector each is to cover; provides for the necessany detached posts; indicates any special reconnaissance that is to be made; orders the location and disposition of the reserve; disposes of the train if same is ordered to join the outpost; and informs subordinates where information will be sent.
701. Generally it is preferable for the outpost commander to give verbal orders to his support commanders from some locality which overlooks the terrain. The time and locality should be so selected that the support commanders may join their commands and conduct them to their positions without causing mnnecessary delay to their troops. The reserve commander should, if possible, receive his orders at the same time as the
support commanders. Subordinates to whom he gives orders sepirately shonld he informed of the location of other parts of the outpost.

In large ontposts, written orders are frequently most convenient.

After issuing the initial orders, the ontpost commander inspects the outpost, orders the necessary changes or additions, and sends his superior a report of his dispositions.
702. The reserve is marched to its post by its commander, who then sends out such detachments as have been ordered and places the rest in canp or birouac, over which at least one sentinel should be posted. Connection must be maintained with the main body, the supports and nearby detached posts.
703. The supports march to their posts, using the necessary covering detachments when in advance of the march outpost. A support commander's order should fully explain the situation to subordinates, or to the entire command, if it be small. It should detail the troops for the different ontgnards and, when necessary, define the sector each is to cover. It should provide the necessary sentinels at the post of the support, the patrols to be sent therefrom, and should arrange for the necessary intrenching. Connection should be maintained with adjoining supports and with the outguards furnished by the support.
704. In posting his command the support commander must seek to cover his sector in such manner that the enemy can not reach, in dangerons mmbers and mobserved, the position of the smphort or pass by it within the sector intrusted to the support. On the other hand, he must economize men on obserration and patrol duty, for these duties are musually fatigning. He must practice the greatest economy of men consistent with the requirements of practical security.
705. As soon as the posting of the smpport is completed, its commander carefulls inspects the dispositions and corrects defects, if any, and reports the disposition of his support, including the patrolling ordered, to the ontpost commander. This report is preferably made by means of a sketch.
706. Fach outguard is marched by its commander to its assigned station, and, especially in the case of a picket, is covered by the necessary patrolling to prevent surprise.

Haring reached the position, the commander explains the situation to his men and establisbes reliefs for each sentinel,
and, if possible, for each patrol to be furnished. Besides these sentinels and patrols, a picket must have a sentinel at its post.

The commander then posts the sentinels and points out to them the principal features, such as towns, roads, and streams, and gives their names. He gives the direction and location of the enemy, if known, and of adjoining parts of the ontpost.

He gives to patrols the same information and the necessary orders as to their routes and the frequency with which the same shall be covered. Each patrol should go over its route once before dark.
707. Every picket should maintain connection by patrols with outguards on its right and left. Each comanander will take precaution to conceal his outguard and will generally strengthen his pusition by intrenching.

## Part IV.-OEREMONTES AND INSPECTIONS.

## CEREMONTES.

## General Rules for Ceremonies.

708. The order in which the troons of the varions arms are arranged for ceremonies is prescribed by Army Regulations.

When forming for ceremonies the companies of the battalion and the battalions of the regiment are posted from right to left in line and from head to rear in column, in the order of rank of their respective commanders present in the formation, the senior on the right or at the head.

The commander faces the command ; subordinate commanders face to the front.
709. At the command present arms, given by the colonel, the lieutenant colonel, and the colonel's staff salute; the major's stafir salute at the major's command. Hach staff returns to the carry or order when the command order arms is given by its chief.
\%10. At the assembly for a ceremony companies are formed on their own parades and informally inspected.

At adjutant's call, excent for ceremonies involving a single battalion, each battalion is formed on its own parade, reports are received, and the battalion presented to the major. At the second somuding of adjutant's call the regiment is formed.

## REVIEWS.

## General Rules.

711. The adjutant posts men or otherwise marks the points where the column changes direction in such manner that its flank in passing will be about 12 paces from the reviewing otticer.

The post of the reviewing officer, usually opposite the center of the line, is indicated by a marker.

Officers of the same or higher grade, and distinguished personages invited to accompany the reviewing officer, place themselves on his left; their staffs and orderlies place themselves respectively on the left of the staff and orderlies of the reviewing officer; all others who accompany the reviewing officer place themselves on the left of his staff, their orderlies in rear. A staff officer is designated to escort distinguished personages and to indicate to them their proper positions.
712. While riding around the troops, the reviewing officer may direct his staff, flag and orderlies to remain at the post of the reviewing officer, or that ouly his personal staff and flag shall accompany him; in either case the commanding othcer alone accompanies the reviewing ofticer. If the reviewing oflicer is accompanied by his entire staff, the staff officers of the commander place themselves on the right of the staff of the reviewing officer.

The reviewing officer and others at the reviewing stand salute the color as it passes; when passing around the troops, the reviewing officer and those accompanying him salute the color when passing in front of it.

The reviewing officer returns the salute of the commanding officer of the troops only. Those who accompany the reviewing officer do not salute.
713. In passing in review, each staff salutes with its commander.

714 . After saluting the reviewing officer, the commanding officer of the troops turns out of the column and takes his post on the right of the reviewing officer, his staff on the right of the reviewing officer's staff. When the rear element of his command has passed, without changing his position, he salntes the reviewing officer and then rejoins his command. The commanding officer of the troops and his staff are the only ones who turn ont of column.
715. If the person reviewing the command is not mounted, the commanding officer and his staff on turning out of the column after passing the reviewing officer dismount preparatory to taking post. In such case, the salute of the commanding officer, prior to rejoining his command, is mate with the hand before remounting.
716. When the rank of the reviewing officer entitles him to the honor, each regimental color salutes at the command present
arms, given or repeated by the major of the battalion with which it is posted; and again in passing in review.

717 . The band of an organization plays while the reviewing officer is passing in front of and in rear of the organization.

Each band, immediately after passing the reviewing officer, turns out of the column, takes post in front of and facing him, continues to play until its regiment has passed, then ceases playing and follows in rear of its regiment; the band of the follorring regiment commences to play as soon as the precelling band has ceased.

While marching in review but one band in each brigade plays at a time, and but one band at a time when within 100 paces of the reviewing officer.
718. If the rank of the reviewing officer entitles him to the honor, the band plays the prescribed national air or the field music sounds to the color, march, flourishes, or ruffles when arms are presented. When passing in review at the moment the regimental color salntes, the musicians halted in front of the reviewing officer, sound to the color, march, flourishes, or ruffles.
719. The formation for review may be modified to sult the ground. and the present arms and the ride around the line by the reviewing officer may be dispensed with.

720 . If the post of the reviewing officer is on the left of the column, the troops march in review with the gnide left; the commanding officer and his staff turn ont of the columm to the left, taking post as prescribed above, but to the left of the reviewing officer; in saluting, the captains give the command: 1. Eyes, 2. LEFT.

721 . Except in the review of a single battalion, the troops pass in review in quick time only.
722. In reviews of brigatdes or larger commands, each battalion, after the rear has passed the reviewing officer 50 paces, takes the double time for 100 yards in order not to interfere with the march of the column in rear; if necessary, it then turns out of the column and returus to camp by the most practicable route; the leading battalion of each regiment is followed by the other units of the regiment.
723. In a brigade or larger review a regimental commander maly cause his regiment to stand at ease, rest, or stack arms and fall out ind resume attention, so ats not to interfere with the ceremouy.

$$
19069^{\circ}-14-11
$$

724. When an organization is to be reviewed before an inspector junior in rank to the commanding officer, the commanding officer receives the review and is accompanied by the inspector, who takes post on his left.

## Battalion Review.

725. The battalion having been formed in line, the major faces to the front; the reviewing officer moves a few paces toward the major and halts; the major turns about and commands: 1. Present, 2. $A R M S$, and again turns about and salutes.

The reviewing officer returns the salute; the major turns about, brings the battalion to order arms, and again turns to the front.

The reviewing officer approaches to about 6 paces from the major, the latter salutes, takes post on his right, and accompanies him around the battalion. The band plays. The reviewing officer proceeds to the right of the band, passes in front of the captains to the left of the line and returus to the right, passing in rear of the ifle closers and the band.

On arriving again at the right of the line, the major salutes, halts, and when the reviewing officer and staff have passed moves directly to his post in front of the battalion, faces it, and commands: 1. Pass in review, 2. Squads right, 3. MARCH.

- At the first command the band changes direction if necessary, and halts.
At the third command, given when the band has changed direction, the battalion moves off, the band playing; without command from the major the column changes direction at the points indicated, and column of companies at full distance is formed successively to the left at the second change of direction; the major takes his post 30 paces in front of the band immediately after the second change; the band having passed the reviewing officer, tums to the left out of the column, takes post in front of and facing the reviewing officer, and remains, there until the review terminates.

The major and staff salute, turn the head as in eyes right, and look toward the reviewing officer when the major is 6 paces from him; they return to the carry and turn the head and eyes to the front when the major has passed 6 paces besond him.

Without facing about, each captain or special unit commander, except the drum major, commands: 1. Eyes, in time to add, 2. RIGHT, when at 6 paces from the reviewing officer, and commands FRONT when at 6 paces beyond him. At the command eyes the company officers and noncommissioned officers armed with the saber execute the first motion of present saber; at the command right all turn head and eyes to the right and the company officers complete present saber; at the command front all turn head and eyes to the front and resume the carry saber.

Noncommissioned staff officers. noncommissioned officers in command of subdivisions, and the drum major salute, turn the head and eyes, return to the front, resume the carry or drop the hand, at the points prescribed for the major. Officers and dismounted noncommissioned officers in command of subdivisions with arms in hand render the rifle or saber salute. Guides charged with the step, trace, and direction do not execute eyes right.

If the reviewing officer is entitled to a salute from the color the regimental color salutes when at 6 paces from him, and is raised when at 6 paces beyond him.

The major, haring saluted, takes post on the right of the reviewing officer, remains there until the rear of the battalion has passed, then salutes and rejoins his battalion. The band ceases to play when the column has completed its second change of direction after passing the reviewing officer.
\%26. When the battalion arrives at its original position in column, the major commands: 1. Double time, 2. MARCH.

The band plays in double time.
The battalion passes in review as before, except that in double time the command eyes right is omitted and there is no saluting except by the major when he leaves the reviewing officer.

The review terminates when the rear company has passed the reviewing officer; the band then ceases to play, and, unless otherwise directed by the major, returns to the position it occupied before marching in review, or is dismissed; the major rejoins the battalion and brings it to quick time. The battalion then executes such movements as the reviewing officer may have directed, or is marched to its parade ground and dismissed.

Marching past in double time may, in the discretion of the reviewing officer, be omitted; the review terminates when the major rejoins his battalion.
727. At battalion revlew the major and his staff may be dismounted in the discretion of the commanding officer.

## Regimental Review.

728. The regiment is formed in line or in line of masses.

In line the review proceeds as in the battalion, substituting " colonel" for " major" and "regiment" for "battalion."

To march the regiment in review, the colonel commands: PASS IN REVIEW. The band changes direction, if necessary, and halts. Each major then commands: 1. Squads right, 2. MARCH.

The band marches at the command of the major of the leading battalion.

At the second change of direction each major takes post 20 paces in front of his leading company.

The rear of the column having passed the reviewing officer, the battalions, unless otherwise directed, are marched to their parades and dismissed.

In line of masses, when the reviewing officer has passed around the regiment, the colonel commands: PASS IN REVIEW. The band changes direction, if necessary, and halts. The major of the right battalion then commands: 1. Column of squads, first company, squads right, 2. MARCH. At the command march the band and the leading company of the right battalion move off. Each company and battalion in rear moves off in time to follow at its proper distance.
729. The review of a small body of troops composed of different arms is conducted on the principles laid down for the regiment. The troops of each arm are formed and marched according to the clrill regulations for that arm.

## Review of Large Commands.

730. A command consisting of one regiment, or less, and detachments of other arms is formed for review as ordered by the commanding oflicer. The principles of regimental review will be observed whenever practicable.
731. In the review of a brigade or larger command the present arms and the ride around the line by the reviewing officer are omitted. The troops form and march in the order prescribed by the commanding officer.

## PARADES.

## General Rules.

[^3]sounding off; they resume attention with the adjutant. If mounted, they remain at attention.
733. At the command report, given by a battalion adjutant, the captains in succession from the right salute and report: A (or other) company, present or accounted for; or, A (or other) company, (so many) officers or enlisted men absent, and resume the order saber; at the same command given by the regimental adjutant, the majors similarly report their battalions.

## Battalion Parade.

734. At adjutant's call the battalion is formed in line but not presented. Lieutenants take their posts in front of the center of their respective platoons at the captain's command for dressing his company on the line. The major takes post at a convenient distance in front of the center and facing the battalion.

The adjutant, from his post in front of the center of the battalion, after commanding: 1. Guides, 2. POSTS, adds: 1. Parade, 2. REST; the battalion executes parade rest. The adjutant directs the band: SOUND OFF.

The band, playing in quick time, passes in front of the line of officers to the left of the line and back to its post on the right. when it ceases playing. At evening parade, when the band ceases playing, retreat is sounded by the field music and, following the last note and while the thag is being lowered, the hand llays the Star Spangled Banner.

Just before the last note of retreat, the adjutant comes to attention and, as the last mote ends, commands: 1. Battalion, 2. ATTENTION. When the band ceases playing he commands: 1. Present, 2. ARWS. He then turns about and reports: Sir, the parade is formed. The major directs the adjutant: Take your post, Sir. 'The adjutant moves at a'trot (if dismomnted, in quick time), passes by the major's right, and takes his post.

The major driws saber and commands: 1. Order, 2. ARMS, and adds such exercises in the mannal of arms as he may desire. Officers, noncommissioned officers commanding companies or armed with the saber, and the color gnard, having once executed order arms, remain in that position during the exerclses in the mamual.

The major then directs the adjutant: Receive the reports, Sir. The adjutant, passing by the major's right, advances at a trot (if diswounted, in quick time) toward the center of the line,
halts midway between it and the major, and commands: REPORT.

The reports received, the adjutant turns about, and reports: Sir, all are present or accounted for; or Sir, (so many) officers or enlisted men are absent, including in the list of absentees those from the band and field music reported to him by the drum major prior to the parade.

The major directs: Publish the orders, Sir.
The adjutant turns about and commands: Attention to orders; he then reads the orders, and commands: 1. Officers, 2. CENTER, 3. MARCH.

At the command center, the company officers carry saber and face to the center. At the command march, they close to the center and face to the front; the adjutant turns about and takes his post.

The officers having closed and faced to the front, the senior commands: 1. Forward, 2. MARCH. The officers adrance, the band playing; the left officer of the center or right center company is the guide, and marches on the major; the officers are halted at 6 paces from the major by the senior who commands: 1. Officers, 2. HALT. They halt and salute, returning to the carry saber with the major. The major then gives such instructions as he deems necessary, and commands: 1. Officers, 2. POSTS, 3. MARCH.

At the command posts, company officers face about.
At the command march, they step off with guide as before, and the senior commands: 1. Officers, 2. HALT, so as to halt 3 paces from the line; he then adds: 1. POSTS, 2. MARCH.

At the command posts, officers face outward and, at the command march, step off in succession at 4 paces distance, resume their posts and order saber; the lieutenants march directly to their posts in rear of their companies.

The music ceases when all officers have resumed their posts.
The major then commands: 1. Pass in review, 2. Squads right, 3. MARCH, and returns saber.

The battalion marches according to the principles of review; when the last company has passed, the ceremony is concluded.

The band contiuues to play while the companies are in march upon the parade ground. Companies are formed in column of squads, without halting, and are marched to their respective parades by their captains.

When the company officers have saluted the major, he may direct them to form line with the staff, in which case they indi-
vidually move to the front, passing to the right and left of the major and staff, halt on the line established by the staff, face about, and stand at attention. The music ceases when the officers join the staff. The major causes the companies to pass in review under the command of their first sergeants by the same commands as before. The company officers return saber with the major and remain at attention.

## Regimental' Parade.

735. The regiment is formed in line or in line of masses; the formation having proceeded up to, but not including the present, the parade proceeds as described for the battalion, with the following exceptions:
"Colonel" is substituted for " major" "regiment" for battalion;" in the description, and "battalions" for " battalion " in the commands.

Lieutenants remain in the line of file closers.
After publishing the orders, the adjutant commands: 1. Officers, center, 2. MARCH.

The company commanders remain at their pusts with their companies.

The field and staff officers form one line, closing on the center. The senior commands: 1. Forward, 2. MARCH.

The second major is the guide and marches on the colonel.
After being dismissed by the colonel, each major moves individually to the front, turns outward, and followed by his staff resumes his post by the most direct line. The colonel directs the lieutenant colonel to march the regiment in review; the latter moves to a point midway between the colonel and the regiment and marches the regiment in review as prescribed. if the lieutenant colonel is not present the colonel gives the necessary commands for marching the regiment in review.

## ESCORTS.

## Escort of the Color.

736. The regiment being in line, the colonel details a company, other than the color company, to receive and escort the national color to its place in line. During the ceremony the regimental color remains with the color guard at its post with the regiment.

The band moves straight to its front mitil clear of the line of field officers, changes direction to the right, and is halted: the designated company forms column of platoons in rear of the band, the color bearer or bearers between the platoons.

The escort then marches without music to the colonel's office or quarters and is formed in line facing the entrance, the band on the right, the color bearer in the line of file closers.

The color bearer, preceded by the first lieutenant and followed by a sergeant of the escort, then goes to obtain the color.

When the color bearer comes out, followed by the lieutenant and sergeant, he halts before the entrance, facing the escort; the lieutenant places himself on the right, the sergeaut on the left of the color bearer; the escort presents arms, and the field music sounds to the color; the first lieutenant and sergeant salute.

Arms are brought to the order; the lieutenant and sergeant return to their posts; the company is formed in column of platoons, the band taking post in front of the column; the color bearer places himself between the platoons; the escort marches In quick time, with guide left, back to the regiment, the band playing; the march is so conducted that when the escort arrives at 50 paces in front of the right of the regiment, the direction of the march shall be parallel to its front; when the color arrives opposite its place in line, the escort is formed in line to the left; the color bearer, passing between the platoons, adrances and halts 12 paces in front of the colonel.

The color bearer having halted, the colonel, who has taken post 30 paces in front of the center of his regiment, faces about, commands: 1. Present, 2. ARMS, resumes his front, and salutes; the field music somnds to the color; and the regimental color bearer executes the color salute at the command present arms.

The colonel then faces about, brings the regiment to the order, at which the color bearer takes his post with the color company.

The escort presents arms and comes to the order with the regiment, at the command of the colonel, after which the captain forms it again in column of platoons, and, preceded by the band, marches it to its place in line, passing around the left flank of the regiment.

The band plays until the escort passes the left of the line, when it ceases playing and returns to its post on the right, passing in rear of the regiment.

The regiment may be brought to a rest when the escort passes the left of the line.
737. Escort of the color is executed by a battalion according to the same principles.

## Escorts of Honor.

738. Escorts of honor are detailed for the purpose of receiving and escorting personages of high rank, civil or military. The troops for this purpose are selected for their soldierly appearance and superior discipline.

The escort forms in line, opposite the place where the personage presents himself, the band on the flank of the escort toward which it will march. On the appearance of the personage, he is received with the honors due to his rank. The escort is formed into column of companies, platoons or squads, and takes up the march, the personage and his staff or retinue taking positions in rear of the column; when he leaves the escort, line is formed and the same honors are paid as before.

When the position of the escort is at a considerable distance from the point where the personage is to be receired, as for instance, where a courtyard or wharf intervenes, a double line of sentinels is posted from that point to the escort, facing inward; the sentinels successively salute as he passes and are then relieved and join the escort.

An officer is appointed to attend him and bear such communication as he may have to make to the commander of the escort.

## Funeral Escort.

739. The composition and strength of the escort are prescribed in Army Regulations.

The escort is formed opposite the quarters of the deceased; the band on that flank of the escort toward which it is to march.

Upon the appearance of the coffin, the commander commands: 1. Present, 2. $A R M S$, and the band plays an appropriate air; arms are then brought to the order.

The escort is next formed into column of companies, platoons. or squads. If the escort be small, it may be marched in line. The procession is formed in the following order: 1. Music, 2. Escort, 3. Clergy, 4. Coffin and pallbearers, 5. Mourners, 6. Members of the former command of the deceased, 7. Other officers and enlisted men, S. Distinguished persons, 9. Delegations, 10. Societies, 11. Civilians. Officers and enlisted men (Nos. 6 and 7), with side arms, are in the order of rank, seniors in front.

The procession being formed, the commander of the escort puts it in march.

The escort marches slowly to solemn music; the column having arrived opposite the grave, line is formed facing it.

The coffin is then carried along the front of the escort to the grave; arms are presented, the music plays an appropriate air; the coffin having been placed over the grave, the music ceases and arms are brought to the order.

The commander next commands: 1. Parade, 2. REST. The escort executes parade rest, officers and men inclining the bead.

When the funeral services are completed and the coffin lowered into the grave the commander canses the escort to resume attention and fire three rounds of blank cartridges, the muzzles of the pieces being elevated. When the escort is greater than a battalion, one battalion is designated to fire the volleys.

A musician then sounds taps.
The escort is then formed into column, marched in quick time to the point where it was assembled, and dismissed.

The band does not play until it has left the inclosure.
When the distance to the place of interment is considerable, the escort, after having left the camp or garrison, may march at ease in quick time until it approaches the burial ground, when it is brought to attention. The music does not play while marching at ease.

In marching at attention, the field music may alternate with the band in playing.
740. When arms are presented at the funeral of a person entitled to any of the following honors, the band plays the prescribed national air, or the field music sounds to the color, march, flourishes, or ruffles, according to the rank of the deceased, after which the band plays an appropriate air. The commander or the escort, in forming colum, gives the appropriate commands for the different arms.
741. At the funeral of a mounted officer or enlisted man, his hurse, in mourning caparison, follows the hearse.
742. Should the entrance of the cemetery prevent the hearse accompanying the escort till the latter halts at the grave, the column is halted at the entrance long enough to take the coffin from the hearse, when the column is again put in march. The Cavalry and Artillery, when unable to enter the inclosure, turn out of the column, face the column, and salute the remains as they pass.
743. When necessary to escort the remains from the quarters of the deceased to the church before the funeral service, arms are presented upon receiving the remains at the quarters and also as they are borne into the church.

744 . The commander of the escort, previous to the funeral, gives the clergyman and pallbearers all needful directions.

## INSPECTIONS.

## Company Inspection.

745. Being in line at a halt: 1. Open ranks, 2. MARCH.

At the command march the front rank executes right dress; the rear rank and the file closers march backward 4 steps, halt, and execute right dress; the lieutenants pass around their respective flanks and take post, facing to the front, 3 paces in front of the center of their respective platoons. The captain aligns the front rank, rear rank, and file closers, takes post 3 paces in front of the right guide, facing to the left, and commands: 1. FRONT, 2. PREPARE FOR INSPECTION.

At the second command the lieutenants carry saber; the captain returns saber and inspects them, after which they face about, order saber, and stand at ease; upon the completion of the inspection they carry saber, face about, and order saber. The captain may direct the lieutenants to accompany or assist him, in which case they return saber and, at the close of the inspection, resume their posts in front of the company, draw and carry saber.

Having inspected the lieutemants, the captain proceeds to the right of the company. Each man, as the captain approaches him, executes inspection arms.

The captain takes the piece, grasping it with his right hand just above the rear sight, the man dropping his hands. The captain inspects the piece, and, with the hand and piece in the same position as in receiring it, hands it back to the man, who takes it with the left hand at the balance and executes order arms.

As the captain returns the piece the next man executes inspection arms, and so on through the company.

Should the piece be inspected without handling, each mau executes order arms as soon as the captain passes to the next man.

The inspection is from right to left in front, and from left to right in rear, of each rank avo of the line of file closers.

When approached by the captain the first sergeant executes inspection saber. Enlisted men armed with the pistol execute inspection pistol by drawing the pistol from the holster and holding it diagonally across the body, barrel up, and 6 inches in front of the neck, muzzle pointing up and to the left. The pistol is returned to the holster as soon as the captain passes.

Upon completion of the inspection the captain takes post facing to the left in front of the right guide and on line with the lieutenants and commands: 1. Close ranks, 2. MARCH.

At the command march the lieutenants resume their posts in line; the rear rank closes to 40 inches, each man covering his file leader; the file closers close to 2 paces from the rear rank.
746. If the company is dismissed, rifles are put away. In quarters headdress and accouterments are removed and the men stand near their respective bunks; in camp they stand covered, but withont accouterments, in front of their tents.

The captain, accompanied by the lieutenants, then inspects the quarters or camp. The first sergeant precedes the captain and calls the men to attention on entering each squad room or on approaching the tents; the men stand at attention, but do not salute.
747. If the inspection is to include an examination of the equipment, the captain, after closing ranks, causes the company to stack arms, to march backward until 4 paces in rear of the stacks and to take intervals. He then commands: 1. UNSLING EQUIPMENT, 2. OPEN PACKS.

At the first command each man unslings his equipment and places it on the ground at his feet, haversack to the front, end of the pack 1 foot in front of toes.

At the second command, pack carriers are unstrapped, packs removed and unrolled, the longer edges of the pack along the lower edge of the cartridge belt. Each man exposes sheltertent pins; removes meat can, knife, fork, and spoon from the meat-can pouch, and places them on the right of the haversack, knife, fork, and spoon in the opened meat can; removes the canteen and cup from the cover and places them on the left side of the haversack; unstraps and spreads out haversack so as to expose its contents; folds up the carrier to uncover the cartridge pouches; opens same; mrolls toilet articles and places them on the onter flap of the haversack; opens first-aid pouch and exposes contents to view. Each man then restumes the attention. (Pl. VI.)


1906 $99^{\circ}$ 14. (To face page 172.)

When the rations are not carried in the haversack the inspection proceeds as described, except that the toilet articles and bacon and condiment cans are displayed on the unrolled packs.

The captain then passes along the ranks and file closers as before, inspects the equipments, returns to the right, and commands: CLOSE PACKS.

Each man rolls up his toilet articles, straps up his haversack and its contents, replaces the meat can, knife, fork, and spoon, and the canteen and cup; closes cartridge pockets and first-aid pouch; rolls up and replaces pack in carrier, and, leaving the equipment in its position on the ground, resumes the position of attention.

All equipments being packed, the captain commands: SLING EQUIPMENT.

The equipments are slung and belts fastened.
The captain then causes the company to assemble and take arms. The inspection is completed as already explained.
748. Should the inspector be other than the captain, the latter, after commanding front, adds REST, and faces to the front. When the inspector approaches, the captain faces to the left, brings the company to attention. faces to the front, and salutes. The salute acknowledged, the captain carries saber. faces to the left, commands: PREPARE FOR INSPECTION, and again faces to the front.

The inspection proceeds as before; the captain returns saber and accompanies the inspector as soon as the latter passes him.

## Battalion Inspection.

749. If there be both inspection and review, the inspection may either precede or follow the review.

The battalion being in column of companies at full distance. all officers dismounted, the major commands: 1. Prepare for inspection, 2. MARCH.

At the first command each captain commands: 0,oen ranks.
At the command march the ranks are opened in each company, as in the inspection of the company.

The field musicians join their companies.
The drum major conducts the band to a position 30 paces in rear of the column, if not already there. and opens ranks.

The major takes post facing to the front and 20 paces in front of the center of the leading company. The staff takes post as if mounted. The color takes post 5 paces in rear of the staff.

Field and staff officers senior in rank to the inspector do not take post in front of the column but accompany him.

The inspector inspects the major, and, accompanied by the latter, inspects the staff officers.

The major then commands: REST, returns saber, and, with his staff, accompanies the inspector.

If the major is the inspector he commands: PEST, returns saber, and inspects his staff, which then accompanies him.

The inspector, commencing at the head of the column; then makes a minute inspection of the color guard, the noncommissioned staff, and the arms, accouterments, dress, and ammunition of each soldier of the several companies in succession, and inspects the band.

The adjutant gives the necessary commands for the inspection of the color guard, noncommissioned staff, and band.

The color guard and noncommissioned staff may be dismissed as soon as inspected.
750. As the inspector approaches each company its captain commands: 1. Company, 2. ATTENTION, 3. PREPARE FOR INSPECTION, and faces to the front; as soon as inspected he returns saber and accompanies the inspector. The inspection proceeds as in company inspection. At its completion the captain closes ranks and commands: REST. Unless otherwise directed by the inspector, the major directs that the company be marched to its parade and dismissed.
751. If the inspection will probably last a long time the rear companies may be permitted to stack arms and fall ont; before the inspector approaches they fall in and take arms.
752. The band plays during the inspection of the companies.

When the inspector approaches the band the adjutant commands: PREPARE FOR INSPECTION.

As the inspector approaches him each man raises his instriment in front of the body, reverses it so as to show both sides, and then returns it.

Company musicians execute inspection similarly.
753. At the inspection of quarters or camp the inspector is accompanied by the captain, followed by the other officers or by such of them as he may designate. The inspection is conducted as described in the company inspection.

## Regimental Inspection.

754. The commands, means, and principles are the same as described for a battalion.

The colonel takes post facing to the front and 20 paces in front of the major of the leading battalion. His staff takes post as if mounted. The color takes post 5 paces in rear of the staff.

The inspector inspects the colonel and the lieutenant colonel, and, accompanied by the colonel, inspects the staff officers.

The colonel then commands: REST, returus saber, and, with the lieutenant colonel and staff, accompanies the inspector.

If the colonel is the inspector he commands: REST, returns saber, and inspects the lieutenant colonel and staff, all of whom then accompany him.

The inspector, commencing at the head of the column, makes a minute inspection of the color guard, noncommissioned staff. each battalion in succession, and the band.

On the approach of the inspector each major brings his battalion to attention. Battalion inspection follows.

## MUSTER.

## Regimental, Battalion, or Company Muster.

755. Muster is preceded by an inspection, and, when practicable, by a review.

The adjutant is provided with the muster roll of the field. staff, and band, the surgeon with the hospital roll; each captain with the roll of his company. A list of absentees, alphabetically arranged, showing cause and place of absence, accompanies each roll.
756. Being in column of companies at open ranks, each captain, as the mustering officer approaches, brings his company to right shoulder arms, and commands: ATTENTION TO MUSTER.

The mustering officer or captain then calls the names on the roll ; each man, as his name is called, anwers Here and brings his piece to order arms.

After muster, the mustering officer, accompanied by the company commanders and such other officers as be may designate.
verifies the presence of the men reported in hospital, on guard, etc.
757. A company may be mustered in the same manner on its own parade ground, the muster to follow the company inspection.

## HONORS AND SALUTES.

758. Further rules governing honors, courtesies, etc., are prescribed in Army Regulations.
759. Saluting distance is that within which recognition is easy. In general it does not exceed 30 paces.

In approaching or passing each other within saluting distance individuals or bodies of troops exchange salutes when at a distance of about 6 paces. If they do not approach each other that closely the salute is exchanged at the point of nearest approach.
760. Eyes right and present arms are not executed by troops except in the ceremonies and in saluting the color.
761. The commander of a body of troops salutes all general officers and his regimental, post, battalion, or company commander, by bringing his command to attention and saluting in person. The troops are brought to attention in time to permit the salute to be rendered at the prescribed distance; they are held at attention until after the salute has been acknowledged.

When an officer entitled to the salute passes in rear of a body of troops, it is brought to attention while he is opposite the post of the commander.

The commander of a body of troops salutes in person all other officers senior to him in rank; the troops are not brought to attention except that a noncommissioned officer commanding a detachment less than a company will bring it to attention before saluting an officer.

The commander of a body of troops exchanges salutes with the commanders of other bodies of troops; the troops are brought to attention during the exchange.
762. An officer commanding a body of troops is saluted by all officers junior to him in rank and by all enlisted men. Me acknowledges the salutes in person; the command is not brought to attention.
763. When covered, all eulisted men within saluting distance and not in ranks, salute all otlicers. The hand is held in the position of salute until the salute has been acknowledged or until the officer has passel or has been passed. If uncovered stand at attention, without saluting.

The rule for officers is stated in paragraph 26 .
Enlisted men out of doors and armed with the rifle, salute with the piece on the right shoulder; if indoors the rifle salute is rendered at the order or trail.
764. Officers not in uniform are saluted if recognized.

76 \%. Officers will acknowledge salutes sumatly and promptly. $19063^{\circ}-14-12$
inPFin


## Part V.-MANUALS.

## THE COLOR.

766. The word "color" implies the national color; it includes the regimental color when both are present.

The rules prescribing the colors to be carried by regiments and battalions on all occasions are contained in Army Regulations.
767. In garrison the colors, when not in use, are kept in the office or quarters of the colonel, and are escorted thereto and, therefrom by the color guard. In camp the colors, when not in use, are in front of the colonel's tent. From reveille to retreat, when the weather permits, they are displayed uncased; from retreat to reveille and during indlement weather they are cased.

Colors are said to be cased whei furled and protected by the oil-cloth covering.

768 The regimental color salutes in the ceremony of escort of the color, and when saluting an officer entitled to the honor, but in no other case.

If marching, the salute is executed when at 6 paces from the officer entitled to the salute; the carry is resumed when 6 paces beyond him.

The national color renders no salnte.

## The Color Guard.

769. The color guard consists of two color sergeants, who are the color bearers, and two experienced privates selected by the colonel. The senior color sergeant carries the national color; the junior color sergeant carries the regimental color. The regimental color, when carried, is always on the left of the national color, in whatever direction they may face.
770. The color guard is formed and marched in one rank. the color bearers in the center. It is marched in the same manner and by the same commands as a squad, substituting, when necessary, guard for squad.
771. The color company is the center or right center company of the center or right center battalion. The color guard remains with that company unless otherwise directed.
772. In line the color guard is in the interval between the inner guides of the right and left center companies.

In line of columns or in close line, the color guard is midway between the right and left center companies and on line with the captains.

In column of companies or platoons the color guard is midway between the color company and the company in rear of the color company and equidistant from the flanks of the column.

In close colum the color guard-is on the flank of the color company.

In column of squads the color guard is in the column between the color company and the company originally on its left.

When the regiment is formed in line of masses for ceremonies. the color forms on the left of the leading company of the center (right center) battalion. It rejoins the culor company when the regiment changes from line of masses.
773. The color guard when with a battalion that takes the battle formation, joins the regimental reserve, whose commander directs the color guird to join a certain company of the reserve.
774. The color guard executes neither luadings nor firings: in rendering honors, it executes all movements in the maual: in drill, all movements unless specially excused.

## To Receive the Color.

775. The color guard, by command of the senior color sergeant, presents arms on receiving and parting with the color. After parting with the color, the color guard is brought to order arms by command of the senior member who is placed as the right man of the guard.
776. At drills and ceremomies, excepting escort of the color, the color, if present, is received by the color company after its formation.

The formation of the color company completed, the captain faces to the front; the color guard, conducted by the senior sergeant, approaches from the front and halts at a distance of 10 paces from the captain, who then faces about, brings the company to the present, faces to the front, salutes, again faces about and brings the company to the order. The color guard comes to the present and order at the command of the captain, and is then marched by the color sergeant directly to its post on the left of the color company.
777. When the battalion is dismissed the color guard escorts the color to the office or quarters of the colonel.

## Manual of the Color.

778. At the carry the heel of the pike rests in the socket of the sling; the right hand grasps the pike at the height of the shoulder.

At the order the heel of the pike rests on the ground near the right toe, the right hand holding the pile in a vertical position.

At parade rest the heel of the pike is on the ground, as at the order; the pike is lield with both hands in front of the center of the body, left hand uppermost.

The order is resmmed at the command attention.
The left hand assists the right when necessary.
The carry is the habitual position when the troops are at a shoulder, port, or trail.

The order and parade rest are executed with the troops.
The color salute: Being at a carry, slip the right hand up the pike to the height of the eye then lower the pike by straightening the arm to the front.

## THE BAND.

779. The band is formed in two or more ranks, with sufficient intervals between the men and distances between the ranks to permit of a free use of the instruments.

The field music, when united, forms with and in rear of the band; when the band is not present the posts, movements, and duties of the field music are the same as prescribed for the band; when a musician is in charge his position is on the right of the front rank. When the battalion or regiment turns about by squads, the band executes the countermarch; when the battalion or regiment executes right, left, or about face, the band faces in the same manner.

In marching, each rank dresses to the right.
In executing open ranks each rank of the band takes the distance of 3 paces from the rank next in front; the drum major verifies the alignment.

The field music sounds the march, flourishes, or ruffles, and to the color at the signal of the drum major.
780. The drum major is 3 paces in front of the center of the front rank, and gives the signals or commands for the morements of the baud as for a squad, substituting in the commands band for squad.

## Signals of the Drum Major.

781. Preparatory to a sigual the staff is held with the right hand near the head of the staff, hand below the chin, back to the front, ferrule pointed upward and to the right.

Prepare to play: Face toward the band and extend the right arm to its full length in the direction of the staff. Play: Bring the arm back to its original position in front of the body.

Prepare to cease playing: Extend the right arm to its full length in the direction of the staff. Cease playing: Bring the arm back to its original position in frout of the body.

To march: Turn the wrist and bring the staff to the front, the ferrule pointing upward and to the front; extend the arm to its full length in the direction of the staff.

To halt: Lower the staff into the raised left hand and raise the staff horizontally above the head with both hands, the arms 189
extended; lower the staff with both hauds to a horizontal position at the height of the hips.

To countermarch: Face toward the band and give the sigual to march. The countermarch is executed by each front-rank man to the right of the drum major turning to the right about, each to the left, turning to the left about, each followed by the men covering him. The drum major passes through the center.

To oblique: Bring the staff to a horizontal position, the head of the staff opposite the neck, the ferrule pointing in the direction the obllque is to be made; extend the arm to its full length in the direction of the staff.

To march by the right flank: Extend the arm to the right, the staff vertical, ferrule upward, back of the hand to the rear.

To march by the left flank: Extend the arm to the left, the staff vertical, ferrule upward, back of the hand to the front.

To diminish front: Let the ferrule fall into the left hand at the height of the eyes, right hand at the height of the hip.

To increase front: Let the ferrule fall into the left hand at the height of the hip, right hand at the height of the neck.

The march, flourishes, or ruffles: Bring the stafif to a vertical position, hand opposite the neck, back of the hand to the front, ferrule pointing down.

To the color: Bring the staff to a horizontal position at the height of the neck, back of the hand to the rear, ferrule pointing to the left.

When the band is playing, in marching, the drum major beats the time with his staff and supports the left hand at the hip, fingers in front, thumb to the rear.

The drum major, with staff in haml, salutes by bringing his staff to a rertical position, head of the staff up and opposite the left shoulder.

The drum major, marching in review with staff in hand, salutes by bringing his staff to a vertical position, head of the staff up and opposite the left shonlder.

At a halt, and the band not playing, the drum major holds his staff with the ferrule touching the ground about 1 inch from toe of right foot, at an angle of about $60^{\circ}$, ball pointing upward to the right, right hand grasping staff near the ball, back of the hand to the front; left hand at the hip, tingers in front, thumb to the rear.

## MANUAL OF THE SABER.

## 782. 1. Draw, 2. SABER.

At the command draw unhook the saber with the thumb and first two fingers of the left hand, thumb on the end of the hook, fingers lifting the upper ring; grasp the scabbard with the left hand at the upper band, bring the hilt a little forward, seize the grip with the right hand, and draw the blade 6 inches out of the scabbard, pressing the scabbard against the thigh with the left hand.

At the command saber draw the saber quickly, raising the arm to its full extent to the right front, at an angle of about $45^{\circ}$ with the horizontal, the saber, edge down, in a straight line with the arm; make a slight pause and bring the back of the blade against the shoulder, edge to the front, arm nearly extended, hand by the side, elbow back, third and fourth fingers back of the grip; at the same time hook up the scabbard with the thumb and first two fingers of the left hand, thumb through the upper ring, fingers supporting it; drop the left hand by the side.

This is the position of carry saber dismounted.
Officers and noncommissioned oflicers armed with the saber unhook the scabbard before mounting; when mounted, in the first motion of draw saber they reach with the right hand over the bridle hand and without the aid of the bridle hand draw the saber as before; the right haud at the carry rests on the right thigh.

On foot the scabbard is carried hooked up.
783. When publishing orders, calling the roll, etc., the saber is held suspended from the right wrist by the saber knot; when the saber knot is used it is placed on the wrist before drawing saber and taken off after returning saber.
784. Being at the order or carry: 1. Present, 2. SABER (or ARMS).

At the command present raise and carry the saber to the front, base of the hilt as high as the chin and 6 inches in front of the neck, edge to the left, point 6 inches farther to the front than the hilt, thumb extended on the left of the grip, all fingers grasping the grip.

At the command saber, or arms, lower the saber, point in prolongation of the right foot and near the ground, edge to the left, hand by the side, thumb on left of grip, arm extended. If mounted, the hand is held behind the thigh, point a little to the right and front of the stirrup.

In rendering honors with troops oflicers execute the first motion of the salute at the command present, the second motion at the command arms; enlisted men with the saber execute the first motion at the command arms and omit the second motion.
785. Being at a carry: 1. Order, 2. SABER (or ARMS).

Drop the point of the saber directly to the front, point on or near the ground, edge down, thumb on back of grip.

Being at the present saber, should the next command be order arms, officers and noncommissioned oflicers armed with the saber order saber; if the command be other than order arms, they execute carry saber.

When arms are brought to the order the officers or enlisted men with the saber drawn order saber.
786. The saber is held at the carry while giving commands, marching at attention, or changing position in quick time.

When at the order saber's are bronght to the carry when arms are brought to any position except the present or parade rest.
787. Being at the order: 1. Parade, 2. REST.

Take the position of parade rest except that the left hand is uppermost and rests on the right hand, point of saber on or near the ground ir frout of the center of the body, edge to the right.

At the command attention resume the order saber and the position of the soldier.
788. In marching in double time the saber is carried diagonally across the breast, edge to the front; the left hand steadies the scabbard.
789. Officers and noncommissioned officers armed with the saber, on all duties under arms draw and return saber without waiting for command. All commands to soldiers under arms are given with the saber drawn.

790 . Being at a carry: 1. Return, 2. SABER.
At the command return carry the right hand opposite to and $\epsilon$ inches from the left shoulder, saber vertical, edge to the left; at the same time unhook and lower the scabbard with the left hand and grasp it at the upper band.

At the command saber drop the point to the rear and pass the blade across and along the left arm; turn the head slightly to the left, fixing the eyes on the opening of the scabbard, raise the right hand, insert and retirn the blade; free the wrist from the saber knot (if inserted in it), turn the head to the front, drop the right hand by the side; hook up the scabbard with the left hand, drop the left hand by the side.

Officers and noncommissioned officirs armed with the saber, when mounted, returu saber without using the left hand; the scabbard is hooked up on dismounting.
791. At inspection enlisted men with the saber drawn execute the first motion of present saber and turn the wrist to show both sides of the blade, resuming the carry when the inspector has passed.

## MANUAL OF TENT PITCHING.

Shelter Tents.

792. Being in line or in column of platoons, the captain commands: FORM FOR SHELTER TENTS.

The officers, first sergeant, and guides fall out ; the cooks form a file on the flank of the company nearest the kitchen, the first sergeant and right guide fall in, forming the right file of the company; blank files are filled by the file closers or by men taken from the front rank; the remaining guide, or guides, and file closers form on a convenient flank. Before forming column of platoons, preparatory to pitching tents, the company may be redivided into two or more platoons, regardless of the size of each.
793. The captain then causes the company to take intervals as described in the School of the Squad, and commands: PITCH TENTS.

At the command pitch tents, each man stejs off obliquely to the right with the right foot and lays his rifle on the gromnd, the butt of the rifle near the toe of the right foot, muzzle to the front, barrel to the left, and steps back into his place; each front-rank man then draws his bayonet and sticks it in the ground by the outside of the right heel.

Equipments are unslung, packs opened, shelter half and pins removed; each man then spreads his shelter half, small triangle to the rear, flat upon the ground the tent is to occups, the rearrank man's half on the right. The halves are then buttoned together; the guy loops at both ends of the upper half are passed through the buttonholes provided in the upper half; the whipped end of the guy rope is then passed through both guy loops and secured, this at both ends of the tent. Each front-rauk man inserts the muzzle of his rifle under the front end of the ridge and holds the rifle upright, sling to the front, heel of butt on the ground beside the bayonet. His rear-rank man pias down the front corners of the tent on the line of bayonets, stretching the tent taut; he then inserts a piu In the eye of the front guy rope and drives the pin at such a distance in front of the riffe as to hold the rope taut; both men go to the rear of the tent, each pins down a corner, stretching the sides and rear of the tent before securing; the rear-rank man then inserts an intrenching tool, or a bayonet in its scabbard, under the rear end
of the ridge inside the tent, the front-rank man pegging down the end of the rear guy ropes; the rest of the pins are then driven by both men, the rear-rank man working on the right.

The front flaps of the tent are not fastened down, but thrown back on the tent.

As soon as the tent is pitched each man arranges his equipment and the contents of his pack in the tent and stands at attention in front of his own half on line with the front guyrope pin.

To have a uniform slope when the tents are pitched, the guy ropes should all be of the same length.
794. When the pack is not carried the company is formed for shelter tents, intervals are taken, arms are laid aside or on the ground, the men are dismissed and proceed to the wagon, secure their packs, return to their places, and pitch tents as heretofore described.
-95. Double shelter tents may be pitched by first pitching one tent as heretofore described, then pitching a second tent against the opening of the first, using one rifle to support both tents, and passing the front gny ropes over and down the sides of the opposite tents. The front corner of one tent is not pegged down, but is thrown back to permit an opening into the tent.

## Single Sleeping Bag.

796. Spread the poncho on the gromnd, buttoned end at the feet, buttoned side to the left; fold the blanket once across its short dimension and lay it on the poncho, folded side along the right side of the poncho; tie the blanket together along the left side by means of the tapes provided; fold the left half of the poncho over the blanket and button it together along the side and bottom.

## Double Sleeping Bag.

797. Spread one poncho on the ground, buttoned end at the feet, buttoned side to the left; spread the blankets on top of the poncho; tie the edges of the blankets together with the tapes movided; siread a second poncho on top of the blankets, buttoned end at the feet, buttoned side to the right; button the two ponchos together along both sides and across the end.

## To Strike Shelter Tents.

798. The men standing in front of their tents: STRIKE TENTS.

Equipments and rifles are removed from the tent; the tents are lowered, packs made up, and equipments slung, and the meu stand at attention in the places originally occupied after taking intervals.

In shelter-tent camps, in localities where suitable material is procurable, tent poles may be improvised and used in lieu of the rifle and bayonet or intrenching tool as supports for the shelter tent.

## Common and Wall Tents.

799. Four men pitch each tent.

Drive a pin to mark the center of the door; spread the tent on the ground to be occupied; place door loops over door pin: draw front conners tant, align, and peg them down; lace rear door, if necessary ; draw rear corners taut in both directions and peg them down; the four corner guy pins are then driven in prolongation of the diagonals of the tent and about 2 paces beyond the corner pins; temporarily loosen the front door and the lee corner loops from the pins; insert uprights and ridge pole, inserting the pole pins in ridge pole and in eyelets of tent and fly ; raise the tent; hold it in position: replace lee corner loops, and secure corner and fly gny ropes; tighten same to hold poles vertical; drive wall pins throngh the loons as they hang; drive intermediate guy pins, aligning them on corner pins already driven.

## The Pyramidal Tent.

800. One squad pitches each tent.

The corporal drives a pin to mark the center of the door. The others of the squad unfold the tent and spread it out on the ground to be oceupied, pole and tripod underneath. The corporal places the cloor loops over the cloor pin; one man goes to each corner of the tent; the two men in front draw the front corners taut, align the front of the tent with the company line of tents, and peg the corners down; the two men in rear draw rear corners tat in both directions and peg them down. The same four men drive the four corner guy pins in prolongation of the diagonals of the rent, about 2 paces beyond the corner pins. Neantime, the other men of the squad, having crept nnder the tent, insert the tent pole spindle in top plate. the corporal placing the hood in position; the pole is raised and the lower end inserted in the tripod socket; the tripod is raised
to its proper height. Under the supervision of the corporal the men inside the tent shift the tripod and the, men outside the tent handle the corner guy lines in such manner as to erect the tent with the corner eaves directly above the corner pins. Each outside man, moving to the left, drives pins for the wall loops along one side of the tent and, returning, drives the intermediate guy pins; in both cases the pins are aligned on the corner pins. The inside men assist.

## Conical Wall Tent.

801. Drive the door pin and center pin 8 feet 3 inches apart. Using the hood lines with center pin as center, describe two concentric circles with radii 8 feet, 3 inches and 11 feet 3 inches. In the outer circle drive two door guy pins 3 feet apart. At intervals of about 3 feet drive the other guy pin.

In other respects conical tents are erected practically as in the case of pyramidal tents.

To Strike Common, Wall, Pyramidal, and Conical Wall Tents.

## 802. STRIKE TENTS.

The men first remove all pins except those of the four corner guy ropes, or the four quadrant guy ropes in the case of the conical wall tent. The pius are neatly piled or placed in their receptacle.

One man holds each guy, and when the ground is clear the tent is lowered, folded, or rolled and tied, the poles or tripod and pole fastened together, and the remaining pins collected.

## To Fold Tents.

803. For folding commou, wall, hospital, and storage tents: Spread the tent flat on the ground, folded at the ridge so that bottoms of side walls are even, ends of tent forming triangles to the right and left; fold the triangular ends of the tent in toward the middle, making it rectangular iu shape; fold the top over about 9 inches; fold the tent in two by carrying the top fold over clear to the foot; fold again in two from the top to the foot; throw all guys on tent excent the second from each end; fold the ends in so as to cover about two-thirds' of the second cloths; fold the left end over to meet the turned-in edge of the
right end, then fold the right end orer the top, completing the bundle; tie with the two exposed guys.

## Method of Folding Pyramidal Tent.

The tent is thrown toward the rear and the back wall and roof canvas pulled out smooth. This may be most easily accomplished by leaving the rear-corner wall pins in the ground with the wall loops attached, one man at each rear-corner guy, and one holding the square iron in a perpendicular position and pulling the canvas to its limit away from the former front of the tent. This leaves the three remaining sides of the tent on top of the rear side, with the door side in the middle.

Now carry the right-front corner over and lay it on the leftrear corner. Pull all canvas smooth, throw guys toward square iron, and pull bottom edges even. Then take the right-frout corner and return to the right, covering the right-rear corner. This folds the right side of the tent on itself, with the crease in the middle and under the front side of tent.

## MANUAL OF THE BUGLE.

## Warning Calls.

804. First call, guard mounting, full dress, overcoats, drill, stable, water, and boots and saddles precede the assembly by such interval as may be prescribed by the commanding officer.

Mess, church, and fatigue, classed as service calls, may also be used as warning calls.
First call is the first signal for formation for roll call and for all ceremonies except giard mounting.

Guard mounting is the first signal for guard mounting.
The field music assembles at first call and guard mounting.
In a mixed command, boots and saddles is the signal to mounted troops that their formation is to be mounted; for mounted guard momnting or mounted drill, it immediately follows the signal guard mounting or drill.

When full dress or overcoats are to be worn, the full dress or overcoat call immediately follows first call, guard mounting, or boots and saddles.

## Formation Calls.

805. Assembly: The signal for companies or details to fall in .

Adjutant's call: The signal for companies to form battalion; also for the guard details to form for guard mounting on the camp or garrison parade gromud; it follows the assembly at such interval as may be prescribed by the commanding officer.

It is also used as a signal for the battalious to form regiment, following the first adjutant's call at such interval as the commauding officer may prescribe.

To the color: Is sounded when the color salutes.

## Alarm Calls.

806. Fire call: The signal for the men to fall in, without arms, to extinguish fire.

To arms: The sigual for the men to fall in, under arms, on their company parade grounds as quickly as possible.

To horse: The signal for mounted men to proceed under arms to their horses, saddle, mount and assemble at a designated place as quickly as possible. In extended order this signal is used to remount troops.

## Service Cal/s.

80\%. Tattoo, taps, mess, sick, church, recall, issue, officers', captains', first sergeants', fatigue, school, and the general.

The general is the signal for striking tents and loading wagons preparatory to marching.

Reveille precedes the assembly for roll call; retreat follows the assembly, the interval between being ouly that required for formation and roll call, except when there is parade.

Taps is the signal for extinguishing lights; it is usually preceded by call to quarters by such interval as prescribed by Army Regulations.

Assembly, reveille, retreat, adjutant's call, to the color, the flourishes, ruffles, and the marches are sounded by all the field music united; the other calls, as a rule, are sounded by the musician of the guard or orderly musician; he may also sound the assambly when the musicians are not united.

The morning gun is fired at the first note of reveille, or, if marches be played before reveille, it is fired at the commencement of the first march.

The evening gun is fired at the last note of retreat.

$$
19069^{\circ}-14-12
$$

## BUGLE CALLS.

1. First Call.

2. Guard Mounting.

3. Full Dress.

4. OVERCoats.

5. DRILL.

6. Stable.


> 7. Water.

8. Boots and Saddles.

Quick.

9. Assembly.

10. Adjutant's Call.

Quick.

11. TO The Color.


TO THE COLOR-Concluded.
Enc.

12. Fire.


Repeat at will.

13. TO ARM3.

14. To Horse.

15. Reveille.


End.


16. Retreat.


Retreat-Concluded.


## 17. Tattoo.



TATTOO-Continued.


## TATTOO-Concluded.




BUGLI CALLS.
21. Sick.

22. CHURCH.

23. Recall.

24. Issue.


## BUGLE CALLS.

## 25. Officers' Call


26. Captains' Call.

27. First Sergeants' Call.

28. Fatigue.

29. SchOOL.

30. The General.


3012/2. Flourishes for Review.
Quick.


## BUGLE SIGNALS.

See paragraph 41.

31. Assemble. MARCH.<br>Same as Assembly, No. 9.

32. AtTENTION.

33. Attention to Orders.

34. FORWARD. MARCH.

35. Halt.

36. Double Time. march.

Quick

37. To the Rear. March.

Slow.

38. Commence Firina.

39. Cease Firing.

40. Fix Bayonets.

41. Charge.


## APPENDIX A.

> War Departaient, Office of the Chiff of Staff, Washington, December $2,1911$.

The Infantry Drill Regulations, 1911, have been prepared for the use of troops armed with the United States magazine ritte, model 1903. For the guidance of organizations armed with the United States magazine rifle, model 1898, the following alternative paragraphs are published and will be considered as substitute paragraphs for the corresponding paragraphs in the text: 75 (iu part), $96,98,99,134,139,141,142,148$, and 150.

By order of the Secretary of War:
Leonard Wood, Major General, Chief of staff.

## 75. * * *

Third. The cut-off is kept turned down, except when using the magazine.

## 96. Being at order arms: 1. Unfix, BAYONET.

If the bayonet scabbard is carried on the belt: Take the position of parade rest, grasp the handle of the bayonet firmly with the right band, press the spring with the forefinger of the left band, raise the bayonet until the handle is about 6 inches above the muzzle of the piece, drop the point to the left, back of hand toward the body, and, glancing at the scabbard, return the bayonet, the blade passing between the left arm and body; regrasp the piece with the right hand and resume the order.

If the bayonet scabbard is carried on the haversack: Take the bayonet from the ritle with the left hand and return it to the scabbard in the most convenient manner.

If marching or lying down, the bayonet is fixed and unfixed in the most expeditious and convenient manner and the piece returned to the original position.

Fix and unfix bayonet are executed with promptness and regularity, but not in cadence.
98. Being at order arms: 1. Inspection, 2. ARMS.

At the second command, take the position of port arms. (TWO) With the right hand open the magazine gate, turn the bolt handle up, draw the bult back and glance at the magazine and chamber. Having fuond them empty, or having emptied them, raise the head and eyes to the front.
99. Being at insjection arms: 1. Order (Right shoulder, port), 2. ARMS.

At the preparatory command, push the bolt forward, turn the handle down, close the magazine gate, pull the trigger, and resume port arms. At the command arms, complete the movement ordered.
134. Pieces being loaded and in the position of load, to execute other movements with the pieces loaded: 1. Lock, 2. PIECES.

At the command Pieces turn the safety lock fully to the right.
The safety luck is said to be at the "ready" when turned to the left, and at the "safe" when turned to the right.

The cut-off is said to be "on "when turned up and "off" when turned down.

[^4]thrusts the bolt home with a quick motion, turning down the handle, and carries the hand to the small of the stock. Eack rear-rank man moves to the right front, takes a similar position opposite the interval to the right of his front-rank mau, muzzle of the piece extending beyond the front rank, and loads.
A. skirmish line may load while moving, the pieces being held as nearly as practicable in the position of load.

If kneeling or sitting the position of the piece is similar; if kneeling the left forearn rests on the left thigh; if sitting the elbows are supported by the knees. If lying down the left hand steadies and supports the piece at the balance, the toe of the butt resting on the ground, the muzzle off the ground.

For reference, these positious (standing, kneeling, and lying down) are designated as that of load.

## 141. FILL MAGAZINE.

Thake the position of load, if not already there, open the gate of the magazine with the right thumb, take five cartridges from the box or belt, and place them, with the pullets to the front, in the magazine, turning the barrel slightly to the left to facilitate the insertion of the cartridges; close the gate and carry the right hand to the small of the stock.

To load from the magazine the command From magazine will be given preceding that of LOAD; the cut-off will be turued up on coming to the position of load.

To resume loading from the belt the command From belt will be given preceding the command LOAD; the cut-off will be turned down on coming to the position of load.

The commands from magazine and from belt, indicating the change in the manner of loading, will not be repeated in subsequent commands.

The words from belt apply to cartridge box as well as belt.
In loading from the magazine care should be taken to push the bolt fully forward and turn the handle down before drawing the bolt back, as otherwise the extractor will not catch the cartridge in the chamber, abd jamming will occur with the cartridge following.

To fire from the magazine, the command MAGAZINE FIRE may be given at any time. The cut-off is turned up and an increased rate of fire is executed. After the magazine is exhansted the cut-ofi is turned down and the firing continued, loading from the belt.

Magazine fire is employed only when, in the opinion of the platoon leader or company commander, the maximum rate of tire becomes necessary.

## 142. UNLOAD.

All take the position of load, turn the cut-off up, if not already there, turn the safety lock to the left, and alternately open and close the chamber until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed and the trigger pulled. The cartridges are then picked up, cleaned, and returned to the box or belt, and the piece brought to the order.

## 148. CLIP FIRE.

Turn the cut-off up; fire at will (reloading from the magazine) until the cartridges in the piece are exhausted; turn the cut-off down; fill magazine; reload and take the position of suspend firing.

## 150. CEASE FIRING.

Firing stops; pieces not already there are brought to the position of load, the cartridge is drawn or the empty shell is ejected, the trigger is pulled, sights are laid down, and the piece is brought to the order.

Cease firing is used for long pauses to prepare for changes of position or to steady the men.

## APPENDIX B.

War Department, Office of the Chief of Staff, Washington, December 2, 1911.

Paragraphs 747, 792, 793, 794, 795, 796, 797, and 798, Infantry Drill Regulations. 1911, apply only to troops equipped with the Infantry Equipment, morlel 1910. For troops equipped under General Orders, No. 23. War Department, 1906, and orders amendatory thereof, the alternative paragraphs published herewith will govern.

By order of the Secretary of War :
Leonard Wood, Major General, Chief of Staff.

74\%. If the inspection is to include an examination of the blanket rolls the captain. before dismissing the company and after inspecting the file closers, directs the lieutenants to remain in place, closes ranks, stacks arms, dresses the company back to four paces from the stacks, takes intervals, and commands: 1. Unsling, 2. PACKS, 3. Open, 4. PACKS.

At the second command each man unslings his roll and places it on the ground at his feet, rounded end to the front, square end of shelter half to the right.

At the fourth command the rolls are untied, laid perpendicular to the front with the triangular end of the shelter half to the front. opened, and unrolled to the left; each man prepares the contents of his roll for inspection and resumes the attention.

The captain then returns saber, passes along the ranks and file closers as before, inspects the rolls, returns to the right, draws saber and commands: 1. Close, 2. PACKS.

At the secoud command each man, with his shelter half smoothly spread on the ground with buttons up and triangular end to the front, folds his blanket once across its length and places it upou the shelter half, fold toward the bottom, edge
one-half inch from the square end, the same amount of canvan uncorered at the top and bottom. He then places the parts of the pole on the side of the blanket next the square end of shelter half, near and parallel to the fold, end of pole about 6 inches from the edge of the blanket; nests the pins similarly near the opposite edge of the blanket and distributes the other articles carried in the roll: folds the triangular end and then the exposed portion of the bottom of the shelter half over the blanket.

The two men in each file roll and fasten first the roll of the front and then of the rear rank man. The file closers work similarly two and two, or with the front rank man of a blank file. Each pair stands on the folded side, rolls the blanket roll closely and buckles the straps, passing the end of the strap through both keeper and buckle, back over the buckle and under the keeper. With the roll so lying on the ground that the edge of the shelter half can just be seen when looking vertically downwaid one end is bent upward and over to meet the other, a clore hitch is taken with the guy rope first around the end to which it is attached and then around the other end, adjusting the length of rope between hitches to suit the wearer:

As soon as a file completes its two rolls each man places his roll in the position it was in after being unslung and stands at attention.

All the rolls being completed, the captain commands: 1. Sling, 2. PACKS.

At the second command the rolls are slung, the end containing the pole to the rear.

The company is assembled, takes arms, and the captain completes the inspection as before.
792. Being in line or in column of platoons, the captain commands: FORM FOR SHELTER TENTS.

The officers, first sergeant, and guides fall out; the cooks form at file on the flank of the company nearest the kitchen, the first sergeant and right guide fall in, forming the right file of the company; blank files are filled by the file closers or by men taken from the front rank; the remaining guide or guides, and file closers form on a convenient flank. Before forming column of platoons, preparatory to pitching tents, the company may be redivided into two or more platoons regardless of the size of each.
793. The captain then causes the company to take intervals as described in the School of the Squad, and commands: PITCH TENTS.

At the command pitch tents, each man steps off obliquely to the right with the right foot and lays his rifle on the ground, the butt of the rifle near the toe of the right foot, muzzle to the front, barrel to the left, and steps back into his place; each front rank man then draws his bayonet and sticks it in the ground by the outside of the right heel. All unsling and open the blanket rolls and take out the shelter half, poles, and pins. Each then spreads his shelter half, triangle to the rear, flat upon the ground the tent is to occupy, rear rank man's half on the right. The halres are then buttoned together. Each front rank man joins his pole, inserts the top in the eyes of the halves, and holds the pole upright beside the pin placed in the gromd; his rear rank man, using the pins in front, pins down the front corners of the tent on the line of pins, stretching the canvas taut: he then inserts a pin in the eye of the rope and drives the pin at such distance in front of the pole as to hold the rope taut. Both then go to the rear of the tent; the rear rank man adjusts the pole and the front rank man drives the pins. The rest of the pins are then driven by both men, the rear rank man working on the right.

As suon as the tent is pitched each man arranges the contents of the blanket roll in the tent and stands at attention in front of his own half on line with the frout guy rope pin.

The gny ropes, to have a miform slope when the shelter tents are pitched, should all be of the same length.
794. When the blanket roll is not carried, intervals are taken as described abore; the position of the front pole is marked with a bayonet and equipments are laid aside. The men then proceed to the wagon, secure their rolls, return to their places, and pitch tents as heretofore described.
$\mathbf{7 9 5}$. To pitch double shelter tent, the captain gives the same commands as before, except Take half interval is given instead of Take interval. In taking interval each man follows the preceding man at 2 paces. The captain then commands: PITCH DOUBLE TENTS.

The first sergeant places himself on the right of the right guide and with him pitches a single shelter tent.

Only the odd numbers of the front rank mark the line with the bayonet.

The tent is formed by buttoning together the square ends of two single tents. Two complete tents, except one pole, are used. Two guy rolles are used at each end, the guy pins being placed in front of the corner pins.

The tents are pitched by numbers 1 and 2 , front and rear rank; and by numbers 3 and 4 , front and rear rank; the men falling in on the left are numbered, counting off if necessary.

All the men spread their slielter halves on the ground the tent is to occupy. Those of the front rank are placed with the triangular ends to the front. All four halves are then buttoned together, first the ridges and then the square ends. The front corners of the tent are pinned by the front-rank men, the odd number holding the poles, the even number driving the pins. The rear-rank men similarly pin the rear corners.

While the odd numbers steady the poles, each even number of the front rank takes his pole and enters the tent, where, assisted by the even number of the rear rank he adjusts the pole to the center eyes of the shelter halves in the following order: (1) The lower half of the front tent; (2) the lower half of the rear tent; (3) the upper half of the front tent; (4) the upper half of the rear tent. The guy ropes are then adjusted.

The tents having been pitched, the triangular ends are turned back, contents of the rolls arranged, and the men stand at attention, each opposite his own shelter half and facing out from the tent.
796. Omitted.
797. Omitted.
798. Omitted.

## APPENDIX C.

> MANUAL OF THE BAYONET.
> WAR DEPartMent, Office of THE Chluef of Staff, Washington, February 20, 1913.

The following Manua! of the Bayonet, prepared by a board consisting of Capt. Herschel Tupes, First Infantry, and Capt. Grosvenor L. Townsend, First Infantry, is approved and issued for the information and government of the Regular Army and the Organized Militia of the United States.

By order of the Secretary of War.
Leonard Wood, Major General, Chief of Staff.

## 1 1iI.an!



$$
11+2+2+2+110
$$




```
&)
```





## MANUAL OF THE BAYONET.

## UNITED STATES ARMY.

1. The infantry soldier relies mainly on fire action to disable the enems, but he should know that personal combat is often necessary to obtain success. Therefore, he must be instructed in the use of the riffe and bayonet in hand-to-hand encounters.
2. The object of this instruction is to teach the soldier how to make effective use of the rifle and bayonet in personal combat; to make him quick and proficient in handling his rifle; to give him an accurate eye and a steady hand; and to give him confidence in the bayonet in offense and defense. When skill in these exercises has been acquired, the rifle will still remain a most formidable weapon at close quarters should the bayonet be lost or disabled.
3. Efficiency of organizations in bayonet fighting will be judged by the skill shown by individuals in personal combat. For this purpose pairs or groups of opponents, selected at random from among recruits and trained soldiers, should engage in assaults, using the fencing equipment provided for the purpose.
4. Officers and specially selected and thoronghly instructed noncommissioned officers will act as instructors.
5. Instruction in bayonet combat should begin as soon as the soldier is familiar with the handling of his riffe and will progress, as far as practicable, in the order followed in the text.
6. Instruction is ordinarily given on even ground; but practice should also be had on uneven ground, especially in the attack and defense of intrenchments.
7. These exercises will not be used as a calesthenic drill.
8. The principles of the commands are the same as those given in paragraphs 9, 15, and 38, Infantry Drill Regulations. Inter-
vals and distances will be taken as in paragraphs 109 and 111, Infantry Drill Regulations, except that, in formations for bayonet exercises, the men shonk be at least four paces apart in every direction.
9. Before requiring soldiers to take a position or execute a morement for the first time, the instructor executes the same for the purpose of illustration, after which he requires the soldiers to execute the morement individually. Morements prescribed in this manual will not be executed in cadence as the attempt to do so results in incomplete execution and lack of vigor. Each morement will be executed correctly as quickly as possible by every man. As soon as the movements are executed accurately, the commands are given rapidly, as expertness with the bayonet depends chiefly upon quickness of motion.
10. The exercises will be interrupted at first by short and frequent rests. The rests will be less frequent as proficiency is attained. Fatigue and exhaustion will be specially gnarded against as they prevent proper interest being taken in the exercises and delay the progress of the instruction. Rests will be given from the position of order arms in the manuer prescribed in Infantry Drill Regulations.

## THE BAYONET.

## Nomenclature and Description.

11. The bayonet is a cutting and thrusting weapon consisting of three principal parts, viz, the blade, guard, and grip.

12. The blade has the following parts: Edge, false edge, back, grooves, point, and tang. The length of the blade from guard to point is 16 inches, the edge 14.5 inches, and the false edge 5.6 inches. Length of the rifle, bayonet fixed, is 59.4 inches. The weight of the bayonet is 1 pound; weight of rifle without bayonet is 8.69 pounds. The center of gravity of the rifle, with bayonet fixed, is just in front of the rear sight.

## I. INSTRUCTION WITHOUT THE RIELE.

13. The instructor explains the importance of good footwork and impresses on the men the fact that quickness of foot and suppleness of body are as important for attack and defense as is the ability to parry and deliver a strong point or cut.
14. All foot morements should be made from the position of guard. As far as practicable, they will be made on the balls of the feet to insure quickness and agility. No hard and fast rule can be laid down as to the length of the various foot movements; this depends entirely on the situations occurring in combat.
15. The men having taken intervals or distances, the instructor commands:
16. Bayonet exercise, 2. GUARD.

At the command guard, half face to the right, carry back and place the right foot about once and a hilf its length to the rear and about 3 inches to the right, the feet forming with each other an angle of about $60^{\circ}$, weight of the body balanced equally on the balls of the feet, knees slightly bent, palms of hands on hips, fingers to the front, thumbs to the rear, head erect, hearl and eyes straight to the front.
16. To resume the attention, 1. Squad, 2. ATTENTION. The men take the position of the soldier and fix their attention.
17. ADVANCE. Adrance the left foot quickly about once its length, follow immediately with the right foot the same distance.
18. RETIRE. Move the right foot quickly to the rear about once its length, follow immediately with the left foot the same distance.
19. 1. Front, 2. PASS. Place the right foot quickly about once its length in frunt of the left, advance the left foot to its proper position in frout of the right.
20. 1. Rear, 2. PASS. Place the left foot quickly about once its length in rear of the right, retire the right foot to its proper position in rear of the left.

The passes are used to get quickly within striking distance or to withdraw quickly therefrom.
21. 1. Right, 2. STEP. Step to the right with the right foot about once its length and place the left foot in its proper relative position.
22. 1. Left, 2. STEP. Step to the left with the left foot about once its length and place the right foot in its proper relative position.

These steps are used to circle around an enemy, to secure a more favorable line of attack, or to avoid the opponent's attack. Better ground or more favorable light may be gained in this way. In bayonet fencing and in actual combat the foot first moved in stepping to the right or left is the one which at the moment bears the least weight.

## II. INSTRUCTION WITH THE RIFLE.

23. The commands for and the execution of the foot movements are the same as already given for movements without the rifle.
24. The men having taken intervals or distances, the instructor commands:
25. Bayonet exercise, 2. GUARD.

At the second command take the position of guard (see par. 15) ; at the same time throw the rifle smartly to the front, grasp the riffe with the left hand just below the lower band, fingers between the stock and gun sling, barrel turned slightly to the left, the right hand grasping the small of the stock about 6 inches in front of the right hip, elbows free from the body, bayonet point at the height of the chin.
25. 1. Order, 2. ARMS.

Bring the right foot up to the left and the riffe to the position of order arms, at the same time resuming the position of attention.
26. During the preliminary instruction, attacks and defenses will be executed from guard until proficiency is attained, after


Pai. 24.

which they may be executed from any position in which the rifle is held.

## Attacks.

## 27. 1. THRUST.

Thrust the rifle quickly forward to the full length of the left arm, turning the barrel to the left, and direct the point of the bajonet at the point to be attacked, butt covering the right forearm. At the same time straighten the right leg vigorously and throw the weight of the body forward and on the left leg, the ball of the right foot always on the ground. Guard is resumed immediately without command.

The force of the thrust is delivered principally with the right arm, the left being used to direct the bayonet. The points at which the attack should be directed are, in order of their importance, stomach, chest, head, neck, and limbs.

## 28. 1. LUNGE.

Executed in the same manner as the thrust, excent that the left foot is carried forward about twice its length. The left heel must always be in rear of the left knee. Guard is resumed immediately without conmand. Guard may also be resumed by adrancing the right foot if, for any reason, it is desired to hold the ground gained in lunging. In the latter case, the preparatory comman forward will be given. Each method should be practiced.
29. 1. Butt, 2. STRIKE.

Straighten right arm and right leg vigorously and swing butt of rifle against point of attack, piroting the rifle in the left hand at about the height of the left shoulder, allowing the bayonet to pass to the rear on the left side of the head. Guard is resumed without command.

The points of attack in their order of importance are, head, neck, stomach, and crotch.
30. 1. Cut, 2. DOWN.

Execute a quick downmard stroke, edge of bayonet directed at point of attack. Guard is resumed without command.
31. 1. Cut, 2. RIGHT (LEFT).

With a quick extension of the arms execute a cut to the right (left), directing the edge toward the point attacked. Guard is resumed without command.

$$
19069^{\circ}-14--15
$$



Par. 29.

The cuts are especially useful against the head, neck, and hands of an enemy. In executing left cut it should be remembered that the false, or back edge, is only 5.6 inches long. The cuts can be executed in continuation of strokes, thrusts, lunges, and parries.
32. To direct an attack to the right, left, or rear the soldier will change front as quickly as possible in the most convenient manner, for example: 1. To the right rear, 2. Cut, 3. DOWN; 1. To the right, 2. LUNGE; 1. To the left, 2. THRUST, etc.

Whenever possible the impetus gained by the turning morement of the body should be thrown into the attack. In general this will be best accomplished by turning on the ball of the right foot.

These morements constitute a change of front in which the position of guard is resumed at the completion of the movement.
33. Good judgment of distance is essential. Accuracy in thrusting and lunging is best attained by practicing these attacks against rings or other conrenient openings, about 3 inches in diameter, suitably suspended at desired heights.
34. The thrust and lunges at rings should first be practiced by endearoring to hit the opeuing looked at. This should be followed by directing the attack agaiust one opening while looking at another.
35. The soldier should also experience the effect of actual resistance offered to the bayonet and the butt of the rifle in attacks. This will be taught by practicing attacks against a dummy.
36. Dummies should be constructed in such a manner as to permit the execution of attacks without injury to the point or edge of the bayonet or to the barrel or stock of the rifle. A suitable dummy can be made from pieces of rope about 5 feet in length plaited closely together into a cable between 6 and 12 inches in diameter. Old rope is preferable. Bags weighted and stuffed with hay, straw, sharings, etc., are also suitable.

## Defenses.

37. In the preliminary drills in the defenses the position of guard is resumed, by command, after each parry. When the


men hare become proficient, the instructor will cause them to resume the position of guard instantly without command after the execution of each parry.

## 38. 1. Parry, 2. RIGHT.

Keeping the right hand in the guard position, more the rifle sharply to the right with the left arm, so that the bayonet point is about 6 inches to the right.
39. 1. Parry, 2. LEFT.

More the rifle sharply to the left front with both hands so as to cover the point attacked.

## 40. 1. Parry, 2. H/CH.

Raise the rifle with both hands high enough to clear the line of vision, barrel downward, point of the bayonet to the left front.

When necessary to raise the rifle well above the head, it may be supported between the thumb and forefinger of the left hand. This position will be necessary against attacks from higher elevations, such as men mounted or on top of parapets.
41. 1. Low parry, 2. RIGHT (LEFT).

Carry the point of the bayonet down until it is at the height of the knee, moving the point of the bayonet sutficiently to the right (left) to keep the opponent's attacks clear of the point threatened.

These parries are rarely used, as an attack below the waist leaves the head and body exposed.
42. Parries must not be too wide or sweeping, but sharp, short motions, finished with a jerk or quick catch. The hands should, as far as posible, be kept in the line of attack. Parries against butt strike are made by quickly moving the guard so as to cover the point attacked.
43. To provide against attack from the right, left, or rear the soldier will change front as quickly as possible in the most convenient manner; for example: 1. To the left rear, 2. Parry, 3. HIGH; 1. To the right, 2. Parry, 3. RIGHT, etc.

These movements constitute a change of front in which the position of guard is resumed at the completion of the movement.

In changing front for the purpose of attack or defense, if there is danger of wounding a comrade, the rifle should first be brought to a vertical position.


Par. 44.

## III. INSIRUCTION WITHOUT THE BAYONET.

## 44. 1. Club rifle, 2. SWING.

Being at order arms, at the preparatory command quickly raise and turn the rifle, regrasping it with both hands between the rear sight and muzzle, barrel down, thumbs around the stock and toward the butt; at the same time raise the rifle above the shoulder farthest from the opponent, butt elevated and to the rear, elbows slightly bent and knees straight. Each individual takes such position of the feet, shoulders, and hands as best accords with his natural dexterity. SWING. Tighten the grasp of the hands and swing the rifle to the front and downward, directing it at the head of the opponent and immediately return to the position of club rifle by completing the swing of the rifle downward and to the rear. Repeat by the command, SWING.

The rifle should be swung with sufficient force to break through any guard or parry that may be interposed.

Being at club rifle, order arms is resumed by command.
The use of this attack against dummies or in fencing is prohibited.
45. The position of club rifle may be taken from any position of the rifle prescribed in the Manual of Arms. It will not be taken in' personal combat unless the emergency is such as to preclude the use of the bayonet.

## IV. COMBINED MOVEIMENTS.

46. The purpose of combined morements is to derelop more vigorous attacks and more effective defenses than are obtained by the single movements; to develop skill in passing from attack to defense and the reverse. Every movement to the front should be accompanied by an attack, which is increased in effectiveness by the forward movement of the body. Every movement to the rear should ordinarily be accompanied by a parry and should always be followed by an attack. Movements to the right or left may be accompanied by attacks or defenses.
47. Not more than three movements will be used in any combination. The instructor should first indicate the number of


Par. 44.
movements that are to be combined as two movements or three movements. The execution is determined by one command of execution, and the position of guard is taken upon the completion of the last movement only.

Front pass and LUNGE.
Right step and THRUST.
Left step and low parry RIGHT.
Rear pass, parry left and LUNGE.
Lunge and cut RIGHT.
Parry right and parry HIGH.
Butt strike and cut DOWN.
Thrust and parry HIGH.
Parry high and LUNGE.
Advance, thrust and cut RIGHT:
Right step, parry left and cut DOWN.
To the left, butt strike and cut DOWN.
To the right rear, cut down and butt STRIKE.
48. Attacks against dummies will be practiced. The approach will be made against the dummies both in quick time and double time.

## V. PRACTICAL BAYONET COMBAT.

49. The principles of practical bayonet combat should be tauglit as far as possible during the progress of instruction in bayonet exercises.

50 . The soldier must be continually impressed with the extreme importance of the offensive due to its moral effect. Should an attack fall, it should be followed immediately by another attack before the opponent has an opportunity to assume the offensive. Keep the opponent on the defensive. If, due to circumstances, it is necessary to take the defensive, constantly watch for an opportunity to assume the offensive and take immediate advantage of it.
51. Observe the ground with a view to obtaining the best footing. Time for this will generally be too limited to pernit mure than a single hasty glance.
52. In personal combat watch the opponent's ejes if they can be plainly seen, and do not fix the eyes on his weapon nor upon the point of your attack. If his eyes can not be plainly seen, as in night attacks, watch the morements of his weapon and of his body.
53. Keep the body well corered and deliver attacks rigorously. The point of the bayonet should always be kept as nearly as possible in the line of attack. The less the rifle is moved upward, downward, to the right, or to the left, the better prepared the soldier is for attack or defense.
54. Constantly watch for a chance to attack the opponent's left hand. His position of guard will not differ materially from that described in paragraph 24. If his bayonet is without a cuiting edge, he will be at a great disadyantage.
55. The butt is used for close and sudden attacks. It is particularly useful in riot duty. From the position of port arms a sentry can strike a severe blow with the butt of the riffe.
56. Against a man on foot, armed with a sword, be careful that the muzzle of the rifle is not grasped. All the swordsman's energies will be directed toward getting past the bayonet. Attack him with short, stabbing thrusts, and keep him beyond striking distance of his weapon.
57. The adversary may attempt a greater extension in the thrust and lunge by quitting the grasp of his piece with the left hand and advancing the right as far as possible. When this is done, a sharp parry may cause him to lose control of his rifle, leaving him exposed to a counter attack, which should follow promptly.
58. Against odds a small number of men can fight to best advantage by grouping themselves so as to prevent their beins attacked from behind.
59. In fighting a mounted man armed with a saber every effort must be made to get on his near or left side, because here his reach is much shorter and his parries much weaker. If not possible to disable such an enemy, attack his horse and then renew the attack on the horseman.
60. In receiving night attacks the assailant's movements can be best observed from the kueeling or prone pusition, as his
approach generally brings him against the sky line. Wheu he arrives within attacking distance rise quickly and lunge well forward at the middle of his body.

## VI. FENCING EXERCISES.

61. Fencing exercises in tro lines consist of combinations of thrusts, parries, and foot morements executed at command or at will, the opponent replying with suitable parries and returns.
62. The instructor will inspect the entire fencing equipment before the exercise begins and assure bimself that everything is in such condition as will prerent accidents.
63. The men equip themselves and form in two lines at the order, facing each other, with intervals of about 4 paces between files and a distance of about 2 paces between lines. One line is designated as number 1 ; the other, number 2. Also as attack and defense.
64. The opponents being at the order facing each other, the instructor commands: SALUTE.

Each man, with eyes on his opponent, carries the left hand smartly to the right side, palm of the hand down, thumb and fingers extended and joined, forearm horizontal, forefinger touching the bayonet. (Two.) Drop the arm smartly by the side.

This salute is the fencing salute.
All fencing exercises and all fencing at will betreen individuals will begin and terminate with the formal courtesy of the fencing salute.
65. After the fencing salute has been rendered the instructor commands: 1. Fencing exercise, 2. GUARD.

At the command guard each man comes to the position of guard, heretofore defined, bayonets crossed, each man's bayonet bearing lightly to the right against the corresponding portion of the opponent's bayonet. This position is known as 'the engage or engage right.
66. Being at the engage right: ENGAGE LEFT.

The attack drops the point of his bayonet quickly until clear of his opponent's rifle and describes a semicircle with it upward and to the right; buyonets are crossed similarly is in the en-
gager position, each man's bayonet bearing lightly to the left against the corresponding portion of the opponent's bayonet.
67. Being at engage left: ENGAGE RIGHT.

The attack quickly drops the point of his bayonet until clear of his opponent's rifle and describes a semicircle with it upward and to the left and engages.
68. Being engaged: ENGAGE LEFT AND RIGHT.

The attack engages left and then immediately engages right.
69. Being engaged left: ENGAGE RIGHT AND LEFT.

The attack engages right and then immediately engages left.
70. 1. Number one, ENGAGE RIGHT (LEFT):-2. Number two, COUNTER.

Number one executes the movement ordered, as above; number two quickly drops the point of his bayonet and circles it upward to the original position.
71. In all fencing while maintaining the pressure in the engage, a certain freedom of motion of the rifle is allowable, consisting of the play, or up-and-down motion, of one bayonet against the other. This is necessary to prevent the opponent from divining the intended attack. It also prevents his using the point of contact as a pivot for his assaults. In changing from one engage to the other the movement is controlled by the left hand, the right remaining stationary.
72. After some exercise in engage, engage left, and counter, exercises will be given in the assaults.

## Assaults.

73. The part of the body to be attacked will be designated by name, as head, neck, chest, stomach, legs. No attacks will be made below the knees. The commands are given and the movements for each line are first explained thoroughly by the instructor; the execution begins at the command assault. Number one executes the attack, and number two parries; conversely, at command, number two attacks and number one parries.
74. For convenience in instruction assaults are divided into simple attacks, counter attacks, attacks on the rifle, and feints.

## Simple Attacks.

75. Success in these attacks depends on quickness of movement. "There are three simple attacks-the straight, the disengagement, and the counter disengagement. They are not preceded by a feint.
76. In the straight the bayonet is directed straight at an opening from the engaged position. Contact with the opponent's rifle may, or may not, be abandoned while making it. If the opening be bigh or low, contact with the rifle will usually be abandoned on commencing the attack. If the opening be near his guard, the light pressure used in the engage may be continued in the attack.

Example: Being at the engage right, 1. Number one, at neck (head, chest, right leg, etc.), thrust; 2. Number two, parry right; 3. ASSAULT.
77. In the disengagement contact with the opponent's rifle is abandoned and the point of the bayonet is circled under or over his bayonet or rifle and directed into the opening attacker.' This attack is delivered by one continuous spiral movement of the bayonet from the moment contact is abandoned.

Example: Being at the engage right, 1. Number one, at stomach (left chest, left leg, etc.), thrust; 2. Number two, parry left (ẹtc.) ; 3. ASSAULT.
78. In the counter disengagement a swift attack is made into the opening disclosed while the opponent is attempting to change the engagement of his rifle. It is delivered by one continuous spiral movement of the bayonet into the opening.

Example: Being at the engage right, 1. Number two, engage left; 2. Number one, at chest, thrust; 3. Number two, parry left; 4. ASSAULT.

Number two initiates the movement, number one thrusts as soon as the opening is made, and number two then attempts to parry.
79. A counter attack or return is one made instantly after or in continuation of a parry. The parry should be as narrow as possible. This makes it more difficult for the opponent to recover and counter parry. The counter attack should also be
made at, or just before, the full extension of the opponent's attack, as when it is so made, a simple extension of the arms will generally be sufficient to reach the opponent's body.

Example: Being at engage, 1. Number two, at chest, lunge; 2. Number one, parry right, and at stomach (chest, head, etc.), thrust; 3. ASSAULT.

## Attacks on the Rifle.

80. These movements are made for the purpose of forcing or disclosing an opening into which an attack can be made. They are the press, the beat, and the twist.
81. In the press the attack quickly presses against the opponent's bayonet or rifle with his own and continues the pressure as the attack is delivered.

Example: Being at the engage, 1. Number one, press, and at chest, thrust; 2. Number two, parry right; 3. ASSAULT.
82. The attack by disengagement is particularly effective following the press.

Example: Being at the engage, 1. Number one, press, and at stomach, thrust; 2. Number two, low parry left; 3. ASSAULT.
83. The beat is an attack in which a sharp blow is struck against the opponent's rifle for the purpose of forcing him to expose an opening into which an attack immediately follows. It is used when there is but slight opposition or no contact of rifles.

Example: Being at the engage, 1. Number one, beat, and at stomach (chest, etc.), thrust; 2. Number two, parry left; 3. ASSAULT.
84. In the twist the rifle is crossed over the opponent's rifle or bayonet and his bayonet forced downward with a circular motion and a straight attack made into the opening. It requires superior strength on the part of the attack.

Example: Being at the engage, 1. Number one, twist, and at stomach, thrust; 2. Number two, low parry, left; 3. ASSAULT.

Feints.
85. Feints are morements which threaten or simulate attacks and are made with a view to inducing au opening or parry that
exposes the desired point of attack! They'are either siugle or double, according to the number of such movements made by the attack.
86. In order that the attack may be changed quickly, as little force as possible is put into a feint.

Example: Being at the engage, Number one, feint head thrust; at stomach, lunge; 2. Number two, parry right and low parry right; 3. ASSAULT.

Number one executes the feint and then the attack. Number two executes both parries.
87. In double feints first one part of the body and then another is threatened and a third attacked.

Example: Being at the engage, 1. Number one, feint straight thrust at chest; disengagement at chest; at stomach,. lunge; 2. Number two, parry right, parry left, and low parry left; 3. ASSAULT.
88. An opening may be offered or procured by oppositiou, as in the press or beat.
89. In fencing exercises every feint.should at first be parried. When the defense is able to judge or divine the character of the attack the feint is not necessarily parried, but may be nullified by a counter feint.
90. A counter feint is a feint following the opponent's feint or following a parry of his attack and generally occurs in combined movements.

## Combined Morements.

91: When the men have become thoroughly familiar rith the various foot morements, parries, guards, attacks, feints, etc., the instructor combines several of them and gives the commands in quick succession, increasing the rapidity and number of moveinents as the men become more skillful. Opponents will be changed frequently.

1. Example: Being at the engage, 1. Number one, by disengagement at chest, thrust; 2. Number two, parry left, bight step (left foot first), and lunge; 3. ASSAULT.
2. Example: Being at engage left, Number one, press and lunge; 2. Number two, parry right, left. step, and thrust; © ASSAULT.
3. Example: Being at the engage, Number one, by disengagement at chest, thrust; 2. Number two, parry left, front pass, and at head butt strike; 3. Number one, right step; 4. ASSA
4. Examples 1 and 2 are typical of movements known as cross counters, and example No. 3 of movements known as close counters.
5. A chancery is an attack by means of which the opponent is disarmed, which causes him to lose control of his riffe, or which disables his weapon.
6. When the different combinations are executed with sufticient skill the instructor will devise series of morements to be memorized and executed at the command assault. The accuracy and celerity of the movements will be carefully watched by the instructor, with a view to the correction of faulty execution.
7. It is not intended to restrict the number of movements, but to leare to the discretion of company commanders and the ingenuity of instructors the selection of such other exercises as accord with the object of the drill.

## VII. FENCING AT WILL.

96. As satisfactory progress is made the instructor will proceed to the exercises at will, by which is meant assaults between two men, each endeavoring to hit the other and to aroid being hit himself. Fencing at will should not be alluwed to degenerate into random attacks and defenses.
97. The instructor can supervise but one pair of combatants at a time. Frequent changes should be made so that the men may learn different methods of attack and defense from each other.
98. The contest should begin with simple, careful morements, with a view to forming a correct opinion of the adversary; afterwards everything will depend on coolness, rapid and correct execution of the movements and quick perception of the adrersary's intentions.

- 99. Continual retreat from the adversary's attack and frequent dodging to escape attacks should be avoided. The offensive should be continuslly encouraged.

$$
19069^{\circ}-14-16
$$

100. In fencing at will, when no commands are given, opponents facing each other at the position of order arms, salute. They then immediately and simultaneously assume the position of guard, rifles engaged. Neither man may take the position of guard before his opponent has completed his salute. The choice of position is decided before the salute.
101. The opponents being about two paces apart and the fencing salute having been rendered, the instructor commands, at will, 2. ASSAULT, after which either party has the right to attack. To interrupt the contest the instructor will command HALT, at which the combatants will immediately come to the order. To terminate the contest the instructor will command, 1. Ha/t, 2. SALUTE, at which the combatants will immediately come to the order, salute, and remove their masks.
102. When men have acquired confidence in fencing at will, one opponent should be required to advance upon the other in quick time at charge bayonet, from a distance not to exceed 10 yards, and deliver an attack. As soon as a hit is made by either opponent the instructor commands, $H A L T$, and the assault terminates. Opponents alternate in assaulting. The assailant is likewise required to advance at double time from a distance not exceeding 20 yards and at a ruu from a distance not exceeding 30 yards.
103. The instructor will closely observe the contest and decide doubtful points. He will at once stop the contest upon the slightest indication of temper. After conclusion of the combat he will comment on the action of both parties, point out errors and deficiencies and explain how they may be avoided in the future.
104. As additional instruction, the men may be permitted to wield the rifle left handed, that is on the left side of the body, left hand at the small of the stock. Many men will be able to use this method to advantage. It is also of value in case the left hand is wounded.
105. After men have fenced in pairs, practice should be given in fencing between groups, equally and unequally divided. When practicable, intrenchments will be used in fencing of this character.


Par. 104.

In group fencing it will be necessary to have a sufficient number of umpires to decide hits. An individual receiving a hit is withdrawn at once from the bout, which is decided in favor of the group having the numerical superiority at the end. The fencing salute is not required in group fencing.

## Rules for Fencing at Will.

106. 107. Hits on the legs below the kuees will not be counted. No hit counts unless, in the opinion of the instructor, it has sufficient force to disable.
1. Upon receiring a hit, call out "hit."
2. After receiving a fair hit a counter attack is not permitted. A position of engage is taken.
3. A second or third hit in a combined attack will be counted only when the first hit was not called.
4. When it is necessary to stop the contest-for example, because of breaking of weapons or displacement of means of pro-tection-take the position of the order.
G. When it is necessary to suspend the assanlt for any canse, it will not be resumed until the adversary is ready and in condition to defend himself.
5. Attacks directed at the crotch are prohibited in fencing.
6. Stepping out of bounds, when established, counts as a hit.

## Suggestions for Fencing at Will.

107. When engaging in an assanlt, first study the adrersary's position and proceed by false attacks, executed with speed, to discover, if possible, his instinctive parries. In order to draw the adversary out and induce him to expose that part of the body at which the attack is to be made, it is advisable to simulate an attack by a feint and then make the real attack.
108. Return attacks should be frequently practiced, as they are difficult to parry, and the opponent is within easier reach and more exposed. The return can be made a continuation of the parry, as there is nu previous warning of its delivery, al-
thongh it should always be expected. Returns are made without lunging if the adversary can be reached by thrusts or cuts.
109. Endeavor to overcome the tendency to make a return without knowing where it will hit. Making returus blindly is a bad habit and leads to instinctive returns-that is, habitual returns with certain attacks from certain parries-a fault which the skilled opponent will soon discover.
110. Do not draw the rifle back preparatory to thrusting and luuging.
111. The purpose of fencing at will is to teach the soldier as many forms of simple, effective attacks and defenses as possible. Complicated and intricate movements should not'be attempted.

Hints for Instructors.
112. The influence of the instructor is great. He must be master of his weapon, not only to show the rarious movements, but also to lead in the exercises at will. He should stimulate the zeal of the men and arouse pleasure in the work. Officers should qualify themselves as instructors by fencing with each other.
113. The character of each man, his bodily conformation, and his degree of skill must always be taken into account. When the instructor is demonstrating the combinations, feints, returns, and parries the rapidity of his attack should be regulated by the skill of the pupil and no more force than is necessary shonld be used. If the pupil exposes himself too much in the feints and parries the instructor will, by an attack, convince him of his error; but if these returns be too swiftly or too strongly made the pupil will become overcautious and the precision of his attack will be impaired. The object is to teach the pupil, not to give exhibitions of superior skill.
114. Occasionally the instructor should leare himself uncorered and fail to parry, in order to teach the pupil to take quick advautage of such opportunities.

## VIII. COMPETITIONS.

115. In competitions between different organizations none but skillful fencers will be allowed to participate.
116. In contests between two men judges may assign values to hits as follows:


Stepping out of bounds, 4 points.
117. When superiority between two men is decided by bouts, each bout will be decided by itself, i. e., points won in one bout can not be carried over to another.
118. Details other than those mentioned above will be arranged by the officials of the competition.

## INFANTRY DRILL REGULATIONS.

Changes
No. 7.

WAR DEPARTMENT, Washington, January 21, 1914.

Paragraph 150, as published in appendix to Infantry Drill Regulations, 1911, is changed as follows:

## 150. CEASE FIRING.

Firing stops; pieces not already there are brought to the position of load, the cut-off turned down if firing from magazine, the cartridge is drawn or the empty shell is ejected, the trigger is pulled, sights are laid down, and the piece is brought to the order.

Cease firing is used for long pauses to prepare for changes of position or to steady the men. (C.I. D. R. No. 7, Jan. 21, 1914.)
[2107860, A. G. O. $]$
By order of the Secretary of War:

LEONARD WOOD,<br>Major General, Chief of Staff.

Offictal:
GEO. ANDREWS,
The Adjutant General.

## 

$$
\ln 1 \quad \text { I }
$$

$$
\frac{1+\pi}{x}+\frac{1}{2}
$$



$$
\begin{aligned}
& 8=-29 \\
& 2+1+0) \\
& 4-\operatorname{lig}
\end{aligned}
$$

[C.I. D. R. 8]

## INFANTRY DRILL REGULATIONS.

Changes
No. 8. $\}$

WAR DEPARTMENT, Washington, September 3, 1914.
I.. Paragraphs 34, 47, 792, 793, 794, 795, 798, and 803, Infantry Drill Regulatious, 1911, are changed as follows:
34. (Edition approved August 19, 1911, and edition corrected to November, 1913.) Except in movements executed at attention, commanders or leaders of subdivisions repeat orders, commands, or signals whenever such repetition is deemed necessary to insure prompt and correct execution.
Officers, platoon leaders, guides, and musicians are equipped with whistles. Guides and musicians assist by repeating signals when necessary.
Battalion and company commanders will use a whistle of different tone from that of the whistle used by platoon leaders, guides, and musicians. (C. I. D. R., No. 8, Sept. 3, 1914.)
[2127092 A-A. G. O.]
47. (Edition approved August 19, 1911.) For communicatiou between the firing line and the reserve or commander in rear, the subjoined signals (Signal Corps corles) are prescribed and should be memorized. In transmission, their concealment from the enemy's view should be insured. In the absence of signal flags, the headdress or other substitute may be used.

Letter of alphabet.

If signaled from the rear to the firing line.

Ammunition going forward
Charge (mandatory at all times)
Cease firing
Double time or "rush"
Commence firing
Fix bayonets
Halt
Left
Negative
Move forward
What is the range?
Range
Right
Support going forward
Suspend firing
Target
Affirmative

If signaled from the firing line to the rear.

Ammunition required.
Am about to charge if no instruc-
tions to the contrary.
Cease firing.
Double time or "rush."
Am about to commence firing if uo instructions to the contrary.

Left.
Negative.
Am about to move forward.
What is the range?
Range.
Right.
Support needed.
Suspend firing.
Target.
Affirmative.
(C. I. D. R. No. 8, Sept. 3, 1914.)
[2171825, A. G. O.]
792. (Appendix approved December 2, 1911. Changed by C. I. D. R. No. 2, W. D., 1913.) Omit in the second and third lines the words "causes the company to stack arms, dresses it back to four paces from the stacks, and". (C. I. D. R. No. 8, Sept. 3, 1914.)
[2171825, A. G. O.]
793. (Edition approved August 19, 1911. Changed by C. I. D. P. No. 2 and No. 5, W. D., 1913.) The change published in C. I. D. R., No. 2, W. D., 1913, is rescinded.

Third section, fifth line, change the word "upper" to "lower;", sixth line, insert the words "lower and" before the word "upper," and change the word "half" to "halves." (C.I.D. R. No. 8, Sept. 3, 1914.)

12171825, A. G. O. $\mid$
793. (Appendix approved December 2, 1911. Changed by C. I. D. R. No. 2, W. D., 1913.) The captain then causes the company to take intervals as described in the School of the Squad, and commands: PITCH TENTS.

At the command pitch tents, each man steps off obliquely to the right with the right foot and lays his rifle on the ground, the butt of the rifle near the toe of the right foot, muzzle to the front, barrel to the left, and steps back into his place; each front rank man then draws his bayonet and sticks it in the ground by the outside of the right heel. All unsling and open the blanket rolls and take out the shelter half, poles, and pins. Each then spreads his shelter half. triangle to the rear, flat upon the ground the tent is to occupy, rear rank man's half on the right. The halves are then buttoned together. Each front rank man joins his pole, inserts the top in the eyes of the halves, and holds the pole upright beside the bayonet placed in the ground; his rear rank man, using the pins in front, pins down the front corners of the tent on the line of bayonets, stretching the canvas taut; he then inserts a pin in the eye of the rope and drives the pin at such distance in front of the pole as to hold the rope taut. Both then go to the rear of the tent; the rear rank man adjusts the pole and the front rank man drives the pins. The rest of the pins are then driven by both men, the rear rank man working on the right.

As soon as the tent is pitched each man arranges the contents of the blanket roll in the tent and stands at attention in front of his own half on line with the front guy-rope pin.
The guy ropes, to have a uniform slope when the shelter tents are pitched, should all be of the same length. (C. I. D. R. No. 8, Sept. 3, 1914.)
[2171825, A. G. O.]
793. (Edition corrected to November, 1913.) Third section, fifth line, change the word "upper" to "lower;", sixth line, insert the words "lower and" before the word "upper," and change the word "half" to "halves."

Add the last section of paragraph 798, which section was printed by error in that paragraph. (C. I. D. R. No. 8, Sept. S, 1914.)
[2171825, A. G. O.]
793. (Edition corrected to November, 1913, Appendix B.) Second section, twelfth line, change the word "pin" to "bayonet"; fourteenth line, change the word "pins" to "bayonets." (C.I.D.R. No. 8, Sept. 3, 1914.)
[2171825, A. G. O.]
794. (Appendix approved December 2, 1911.) Omit the words "arms are stacked and" in first and second lines, and add the word "are" after the word "intervals" in second line. (C. I.D. R. No.8, Sept. 3, 1914.)
[2171825, A. G. O.]
795. (Appendix approved December 2, 1911.) In third section; substitute the word "bayonet" for the last two words "tent pin." (C. I. D. R. No. 8, Sept. 3, 1914.)
[2171825, A. G. O.]
798. (Appendix approved December 2, 1911.) Rescinded. (C. I. D. R. No. S, Sept. 3, 1914.)
[2171825, A. G. O.]
798. (Edition corrected to November, 1913.) Omit the last section. (C. I. D. R. No. 8, Sept. 3, 1914.)
[2171825, A. G. O.]
803. (Edition corrected to November, 1913.) Add the following to "Method of folding pyramidal tent":

Next carry the left-front corner to the right and back as described above; this when completed will leave the front and rear sides of the tent lying smooth and flat and the two side walls folded inward, each on itself.

Place the hood in the square iron which has been folded downward toward the bottom of tent, and continue to iold around the square iron as a core, pressing all folds down flat and smooth, and parallel with the bottom of the tent. If each fold is compactly made and the canvas kept smooth, the last fold will exactly cover the lower edge of the canvas. Lay all exposed guys along the
folded eanvas except the two on the center width, which should be pulled out and away from bottom edge to their extreme length for tying. Now, beginning at one end, iold, toward the center on the first seam (that joining the first and second widths) and fold again toward the center so that the already folded canvas will come to within about 3 inches of the middle width. Then fold over to the opposite edge of middle width of cauvas. Then begin folding from opposite end, folding the first. width in half, then making a second fold to come within about 4 or 5 inches of that already folded, turn this fold entirely over that already folded. Take the exposed guys and draw them taut across each other, turn bundle over on the under guy, cross guys on top of bundle drawing tight. Turn bundle over on the crossed guys and tie lengthwise.

When properly tied and pressed together this will make a package 11 by 23 by 34 inches, requiring about 8,855 cubic inches to store or 1rack.

Stencil the organization designation on the lower half of the middle width of canvas in the lack wall. (C. I. D. R. No. 8, Sept. 3, 1914.)
[2171325, A.G.O.]
[C. I. D. R. 8]
II. .The following bugle call is added on page 206, Infantry Drill Regulations, 1911 (edition approved August 19, 1911, and edition corrected to November, 1913):

291 $\frac{1}{2}$ THE GENERAL'S MARCH.

(C. I. D. R. No. 8, Sept. 3, 1914.)
[2192050, A. G. 0.1
By order of the Secretary of War:
W. W. WOTHERSPOON,

Major General, Chief of Staff.
Officlal:
H. P. McCAIN,

The Adjutant General.

## INFANTRY DRILL REGULATIONS.



Paragraph 47, Infantry Drill Regulations, is changed as follows: 47. (Edition approved August 19, 1911, and edition corrected to November, 1913. Changed by C. I. D. R. No. 8, W. D., 1914.) For communication between the firing line and the reserve or commander in rear, the subjoined signals (Signal Corps codes) are prescribed and should be memorized. In transmission, their concealment from the enemy's view should be insured. In the absence of signal flags, the headdress or other substitute may be used.

| Letter of alphabet. | If signaled from the rear to the firing line. | If signaled from the firing line to the rear. |
| :---: | :---: | :---: |
| A A A. | Ammunition going forward. | Ammunition required. |
| C C C. | Charge (mandatory at all times). | Am about to charge if no instruc tions to the contrary. |
| C F | Cease firing. | Cease liring. |
| 1 | Double time or "rush". | Double time or "rush." |
| F | Commence firing. |  |
|  | Fix bayonets. Move forward |  |
| Н H | Halt | Preparing |
| K | Negative | Negative. |
| L | Left. | Left. |
| O | What is the (R N, etc.) | What is the (R N, etc.)? |
|  | Affirmative | Affirmative. |
| R N | Range. | Range. |
| ${ }^{\mathrm{R}}{ }^{\top}$ | Right | Right. |
| S S S | Support going forward | Support needed. |
| SUF | Suspend firing | Suspend firing. |
| T. | Target ....... | Target. |

```
(C.I.D. R. No. 9, Nov. 1.', 1914.)
    [2220245, A. G. O.]
```

By order of the Secretary of War:

## Official:

$10-4!11$
or athotith

2




Mribr intion on,
a) in $\frac{1}{2}$ x a $x$

1

10

$$
1+n^{2} \quad f
$$

$4-3)^{-2}-2$


## INFANTRY DRILL REGULATIONS.

## Changes <br> No. 10. $\}$

## WAR DEPARTMENT,

Washington, Dccember 28, 1914.
Paragraphs 714 and 725, Infantry Drill Regulations, are changed as follows:
714. (Edition approved August 19, 1911, and edition corrected to November, 1913.) After saluting the reviewing ofticer, the commanding officer of the troops turns out of the columm, takes post on the right of the reviewing oflicer, and returns saber; the members of his staff accompanying him take post on the right of the reviewing officer's staff and return saber. When the rear element of his command has passed, without changing his position, the commanding officer of the troops salutes the reviewiug officer; he and the members of his staff accompanying him then draw saber and rejoin his command. The commanding ofticer of the troons and the members of his staff are the only ones who turn out of the column. (C. I. D. R., No. 10, Dcc. 28, 1914.)
725. (Edition approved August 19, 1911, changed by C. I. D. R. No. 6, W. D., 1913; and edition corrected to November, 1913.) Change the eighth and last sections to read as follows:

Without facing about, each captain or special unit commander, except the drum major, commands: 1. Eyes, in time to add, 2. RIGHT, when at 6 paces from the reviewing officer, and commands FRONT when at 6 paces beyoud hiw. At the command eyes the company officers armed with the saber execute the first motion of present saber; at the command right all turn head and eyes to the right, the company officers complete present saber and the noncommissioned officers armed with the saber execute the first motion of present saber; at the command front all turn head and eyes to the front, and officers and noncommissioned officers armed with the saber resume the carry saber; without arms in hand the first motion of the hand salute is made at the command right and the second motion not made until the command front.

* $19069^{\circ}-14-17{ }^{*}$


## 2

The major, having saluted, takes post on the rignt of the reviewing officer, retuins saber and remains there until the rear of the battalion has passed, then salutes, draws saber, and rejoins his battalion. The band ceases to play when the column has completed its second change of direction after passing the reviewing officer. (C.I. D. R., No. 10, Dcc. 28, 191/.)
[2211347, A. G: O, ]
By order of the Secretary of War:
H. L. SCOTI,

Brigadier General, Chief of Staff.
Official:
H. P. MCCAIN.

The Adjutant General.

## INFANTRY DRILL REGULATIONS.

## Changes <br> No. 11. $\}$

## WAR DEPARTMENT, Washington, July 26, 1915.

Paragrapha, 799 and 800 , Infantry Drill Regulations (edition approved August 19, 1911, and edition corrected to November, 1913), are changed as follows:
799. To pitch all types of Army tents, except shelter and conical wall tents: Mark line of tents by driving a wall pin on the spot to be occupied by the right (or left) corner of each tent, For pyramidal tents the interval between adjacent pins should be about 30 feet, which will give a passage of two feet between tents. Spread tripod on the ground where the center of tent is to be, if tripod is used. Spread the tent on the ground to be occupied, door to the front, and place the right (or left) front wall loop over the pin. The door (or doors, if more than one) being fastened and held together at the bottom, the left (or right) corner wall loop is carried to the left (or right) as far as it will go and a wall pin driven through it, the pin being placed in line with the right (or left) corner pins already driven. At the same time the rear corner wall loops are pulled to the rear and outward so that the rear wall of the tent is stretched to complete the rectangle. Wall pins are then driven through these loops. Each corner pin should be directly in rear of the corresponding front corner pin, making a rectangle. Unless the canvas be wet, a small amount of slack should be allowed before the corner pins are driven. According to the size of the tent one or two men, crawling under the tent if necessary, fit each pole or ridge or upright into the ring or ridge pole holes, and such accessories as hood, fly, and brace ropes are adjusted. If a tripod be used an additional man will go under the tent to adjust it. The tent steadied by the remaining men, one at each corner guy rope, will then be raised. If the tent is a ward or storage type, corner poles will now be placed at the four corners. The four corner guy ropes are then placed over the lower notches of the large pins driven in prolongation of the diagonals at such distance as to hold the walls
[C. I. D. R. 11. ]
and ends of the tent vertical and smooth when the guy ropes are drawn taut. A wall pin is then driven through each remaining wall loop and a large pin for each guy rope is driven in line with the corner guy pins already driven. The guy ropes of the tent are placed over the lower notches, while the guy ropes of the fly are placed over the upper notches, and are then drawn taut. Brace ropes, when used, are then secured to stakes or pins suitably placed. (C.'I.'D. R., No. 11, July 26, 1915.)
800. Rescinded. (C. I. D. R., No. 11, July 26, 1915.)
[2258589, A. G. O.]
By order of the Secretary of War:

> H. L. SCOTT, Major General, Chief of Staff.

Offictal:

> H. I' McCAIN, The Adjutant Gencral.

## INFANTRY DRILL REGULATIONS.

$\left.\begin{array}{c}\text { Changes } \\ \text { No. 12. }\end{array}\right\}$
WAR DEPARTMENT, Washington, August 28, 1915.

Paragraphs 26 and 635, Infantry Drill Regulations, are changed as follows:
26. (Edition approved August 19, 1911, changed by C. I. D. R., No. 6, W. D., 1913, and edition corrected to November, 1913.) Change last sentence of second section to read as follows: "Except in the field under campaign or simulated campaign conditions, a mounted officer dismounts before addressing a superior not mounted." (C.I. D. R., No. 12, Aug. 29, 1915.)
635. (Edition approved August 19, 1911, changed by C. I. D. R., No. 2, W. D., 1913, and edition corrected to November, 1913.) Rescind last section. (C.I. D. R., No. 12, Aug. 28, 1915.)
[2246145, A. G. O.]
By order of the Secretary of War:
TASKER H. BLISS, Brigadier General, Acting Chief of Staff.

## Official:

H. P. McCAIN,

The Adjutant General.
$11-1.11$


## INFANTRY DRILL REGULATIONS.

## Changes <br> No. 13. $\}$

WAR DEPARTMENT,<br>Washington, February 4, 1916.

Paragraph 47, Infantry Drill Regulations (edition approved August 19, 1911, and edition corrected to November, 1913), as amended by C. I. D. R. No. 9, W. D., 1914, is rescinded and the following substituted therefor:
47. (1) For communication between the firing line and the reserve or commander in the rear, the subjoined signals (Signal Corps codes) are prescribed and should be memorized. In transmission, their concealment from the enemy's view should be insured. In the absence of signal flags, the headdress or other substitute may be used.

| 1.etter of alphabet. | If signated from the rear to the liring line. | If signaled from the firing line to the rear. |
| :---: | :---: | :---: |
| A M | Ammunition going forward. | Ammunition requ |
| CO | Charge (mandatory at all times).. | Am about to charge if $n n$ in structions to the contrary. |
| C | Cease firing. | Cease firing. |
|  | Double time or "r | Double time or "rush." |
| F | Commence firing | Commence firing. |
| F | Fix bayonets | Fix bayonets. |
|  | Artillery fire is causing us losses. . | Artillery fire is causing a losse |
| H | Move forward | Preparing to move forward. |
| F | Negati | Negative. |
| I. | Left. | Lefl. |
|  | What is the (ii. N., ete.)? inter- | What is the (R.N., ete.)\% 1n- |
| (Ardois and semaphore wnly.) | rogatory. | terrogatory. |


(2) The Two-arm Semaphone Code. (See illustrations on pages following.)
(C.I. D. R., No. 13, Feb. 4, 1916.)
[2268790 D-A. G. O.]
By order of the Secretary of War:

Official:
H. P. McCAIN, The Adjutant General.

TWO-ARM SEMIPHORE CODE.

|  |  |  |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



## INHANTRY DRILL REGULATIONS.

## Changes <br> No. 14.

WAR DEPARTMENT,<br>Washington, May 18, 1916.

Paragraph 43, Infantry Drill Regulations (corrected to Nuvember, 1913), is changed as follows:

Insert after eighth line, page 19, the following:
What range are you using? or What is the range? Extend the arms toward the person addressed, one hand open, palm to the front, resting on the other hand, fist closed.

Are you ready? or I am ready. Raise the hand, fingers extended and joined, palm toward the person addressed.

Commence firing. Move the arm extended in full length, hand palm down, several times through a horizontal arc in front of the body.

Fire faster. Execute rapidly the signal "Commence firing."
Fire slower. Execute slowly the signal "Commence firing."
To swing the cone of fire to the right, or left. Extend the arm in full length to the front, palm to the right (left); swing the arm to right (left), and point in the direction of the new target.

Flx Bayonet. Simulate the movement of the right hand in "Fix bayonet" (paragraph 95).-(C. I. D. R., No. 14, May 18, 1916.)
[2380982, A. G. O.]
By order of the Secretary of War:
H. L. SCOTT, Major General, Chief of Stalf.
Official:
H. P. McCAIN, The Adjutant General.







 r! +1








$$
\begin{aligned}
& \text { [1 I स : } \because \text { ! }
\end{aligned}
$$

## INFANTRY DRILL REGULATIONS.

## Changes <br> No. 15. 3

WAR DEPARTMENT, Washington, July 31, 1916

Paragraphs 34 and 42, Infantry Drill Regulations, 1911, are changed as follows:
34. (Edition approved August 19, 1911, and edition corrected to November, 1913. Changed by C. I. D. R., No. 8, W. D., 1914). Except in movements executed at attention, commanders or leaders of subdivisions repeat orders, commands, or signals whenever such repetition is deemed necessary to insure prompt and correct execution.

Officers, battalion noncommissioned staff officers, platoon leaders, guides, and musicians are equipped with whistles.

The major and his staff will use a whistle of distinctive tone; the captain and company musicians a second and distinctive whistle; the platoon leaders and guides a third distinctive whistle.
(C. I. D. R., No. 15, July 31, 1916.)
[2409852, A. G. O.]
42. (Edition approved August 19, 1911, and edition corrected to November, 1913). Add the following: "All other whistle signals are prohibited."
(C. I. D. R., No. 15, July 31, 1916.)
[2409852, A. G. O.]
By order of the Secretary of War:
H. L. SCOTT, Major General, Chief of Staff.
Official:
H. P. McCAIN,

The Adjutant General.
$10101 \cdot a$
 ?
$2+2$ L 1








# (4) f M: N 



$$
\begin{aligned}
& \text { Tival } \quad \mathrm{L} \\
& 1211+20+0 \\
& \text { Al'an y a }
\end{aligned}
$$

$$
\begin{aligned}
& \begin{array}{c}
4 \\
0 \\
0
\end{array}
\end{aligned}
$$

## INFANTRY DRILL REGULȦTIONS:

Changes\}
No. 16. $\}$

Paragrapha 746 and 747, Infantry Drill Regulations, 1911, are changed as follows:
746. (Edition approved August 19, 1911, and edition corrected to November, 1913.) If the company is dismissed, rifles are put away. In quarters, headdress and accouterments are removed and the mon stand near their respective bunks; in camp they stand covered, but without accoutcrments, in front of their tents.

If the personal field equipment has not been inspected.in rankis and its inspection, in quarters or camp is ordered, each man will arrange the prescribed articles on his bunk, if in quarters or permanent camp, or in front of his half of the tent, if in shelter tent camp, in the same relative order as directed in paragraph 747.

The captain, accompanigd by the lieutenants, then inspects the quarters or camp. The first sergeant precedes the captain and calls tho men to:attention on entering each squad room or on approaching the tents; the men stand at attention but do not salute. (C. I. D. R., No. 16, Aug. 25, 1916.)
747. (Edition approved August 19, 1911, and edition corrected to November, 1913.) If the inspection is to include an examination of the equipment while in ranks, the captain, after closing ranks, causes the company to stack arms, to march backward until 4 paces in rear of the stacks and to take intervals. He then commands:

1. UNSLING EQUIPMENT. 2.OPEN PACKS.

At the first command, each man unslings his equipment and places it on the ground at his feet, haversack to the front end of the pack 1 foot in front of toes.

At the second command, pack carriers are unstrapped, packs removed and unrolled, the longer edge of the pack along the lower edge of the cartridge belt. Each man exposes shelter tent pins
[C. I. D. R. 16.]
removes meat can, knife, fork, and spoon from the meat-can pouch, and places them on the right of the haversack, knife, fork, and spoon in the open meat can; removes the canteen and cup from the cover and places them on the left side of the haversack; unstraps and spreads out haversack so as to expose its contents; folds up the carrier to uncover the cartridge pockets; opens same; unrolls toilet articles and places them on the outer flap of the haversack; places underwear carried in pack on the left half of the open pack, with round fold parallel with front edge of pack; opens first-aid pouch and exposes contents to view. Special articles carried by individual men, such as flag kit, field glasses, compass, steel tape, notebook, etc., will be arranged on the right half of the open pack. Each man then resumes the attention. Plate VI shows the relative position of all articles except underwear and special articles.

The captain then passes along the ranks and file closers as before, inspects the equipment, returns to the right, and commands: CLOSE PACKS.

Each man rolls up his toilct articles and underwear, straps up his haversack and its contents, replaces the meat can, knife, fork, and spoon, and the canteen and cup; closes cartridge pockets and first-aid pouch; restores special articles to their proper receptacles; rolls up and replaces pack in carrier; and, leaving the equipment in its position on the ground, resumes the attention.

All equipments being packed, the captain commands: SLING EQUIPMENT.

The equipments are slung and belts fastened.
The captain then causes the company to assemble and take arms. The inspection is completed as already explained. (C. I. D. R., No. 16, Aug. 25, 1916.)
[2438252, A. G. O.]
By order of the Secretary of War:
H. P. McGAIN,

The Adjutant General.

## INFANTRY DRILL REGULATIONS.

\author{
Changes <br> No. 17. \}

}

WAR DFFARTMENT,
Washington, January 9, $191 \%$.
Paragraphs $26,240,247,251,759,760,761,762,763,764$, and 765, Infantry Drill Regulations (edition approved August 19, 1911, and edltion corrected to Norember, 1913), are changed to read as follows:
26. When making or receiving official reports, or on meeting out of doors, all officers will salute.

Military courtesy requires the junior to salute first, but when the salute is introductory to a report made at a military ceremony or formation, to the representative of a common superior (as, for example, to the adjutant, officer of the das, etc.), the officer making the report, whaterer his rank, will salute first; the officer to whom the report is made will acknowledge by saluting that he has received and understcod the report.
(C. I. D. R. No. 17, Jan. 9, 1917.)
240. Except in a deliberately prepared defensive position. the most accurate and only practicable method of determining the range will generally be to take the mean of several estimates.

Five or cix oficers or men, selected from the most accurate estimators in the company, are designated as range estimators and are specially trained in estimating distances.

Whenerer necessary and practicable, the captain assembles the range estimators, points out the target to thein, and adopts the mean of their estimates. The range estimators then take their customary posts.
(C. I. D. R. No. 17, Jan. 9, 1917.)
247. If the target can not be seen with the naked eye, platoon leaders select an object in front of or behind it, designate this as the aiming target, and dircet a sight setting which will carry the cone of fire into the target.
(C. I. D. B. Ťo. 1~̃, Jan. 9, 1917.)
251. Each platoon leader puts into execution the commands or directions of the captain, having first taken such precautions to insure correct sight setting and clear description of the target or aiming target as the situation permits or requires; thereafter, he gives such additional commands or directions as are necessary to exact compliance with the captain's will. He corrects the sight setting when necessary. He designates an aiming target when the target can not be seen with the naked eye.
† (C.I. D. R. No. 17, Jan. 9, 1917.)
759. (1) Salutes shall be exchanged between officers and enlisted men not in a military formation, nor at drill, work, games, or mess, on every occasion of their meeting, passing near or being addressed, the officer junior in rank or the enlisted man saluting first.
(2) When an officer enters a room where there are several enlisted men, the word "attention" is given by some one who perceives him, when all rise, uncover, and remain standing at attention until the officer leaves the room or directs otherwise. Enlisted men at meals stop eating and remain seated at attention.
(3) An enlisted man, if seated, rises on the approach of an officer, faces toward him, stands at attention, and salutes. Standing he faces an oficer for the same purpose. If the parties remain in the same place or on the same ground, such compliments need not be repeated. Soldiers actually at work do not cease work to salute an officer unless addressed by him.
(4) Before addressing an officer, an enlisted man makes the prescribed salute with the weapon with which he is armed, or, if unarmed, with the right hand. He also makes the same salute after receiving a reply.
(5) In uniform, covered or uncovered, but not in formation, officers and enlisted men salute military persons as follows: With arms in band, the salute prescribed for that arm (sentinels on interior guard duty excented) ; without arms, the righthand salute.
(6) In civilian dress, covered or uncovered, officers and enlisted men sulute military persons with the right-hand salute.
(7) Officers and enlisted men will render the prescribed
salutes in a military manner, the officer janior in rank, or the enlisted men, saluting first. When several ottcers in company are suluted, all entitled to the salute shall retarn it.
(S) Except in the field under campaign or simulated campaign conditions, a mounted ofticer (or soldier) dismounts before addressing a superior officer not mounted.
(9) A man in formation shall not salute when directly addressed, but shall come to attention if at rest or at ease.
(10) Saluting distance is that within which recogaition is easy. In general, it does not exceed 30 paces.
(11) When an officer entitled to the salute passes in rear of a body of troops, it is iorought to attention while he is opposite the post of the commander.
(12) In public converances, such as rallway trains and street cars, and in public places, such as theaters, honors and personal saluies may be omitted when palpably inappropriate or apt to disturb or annoy civilians present.
(13) Soldiers at all times and in all situations pay the same compliments to officers of the Army, Navy, Marine Corps, and Volunteers, and to officers of the National Guard as to officers of their own regiment, corps, or arm of service.
(14) Sentinels on post doíg interior guard duty conform to the foregolng principles, but salute by presenting arms when armed with the rifle. They will not salute ir it interferes with the proper performance of their duties. Troops under arms will salute as prescribed in drill regulations.
(C. I. D. R. No. 17, Jan. 9, 191\%.)
760. (1) Commanders of detachments or other commands will salute oflicers of grades higher thin the person commanding the unit, by first briuging the unit to aftention and then saluting ais required by subparagraph (5), paragraph 759. If the perwon saluted is of a junior or equal grade, the unit need not be at attention in the exchange of salutes.
(2) If two detachments or other commands meet, their commanders will exchange salutes, both commands being at afteution.
(C. I. D. R. Tัo. 17, Jan. 9, 1977.)
761. Salutes and honors, as a rule, are not paid by troops actually engaged in drill, on the march, or In the field under eampaign or simulated campaign conditions. Troops on the service of security pay no compliments whatever.
(C. I. D. R. No. 1~, Jan. 9, 1917.)
762. If the command is in line at a halt (not in the field) and armed with the rifie, or with sabers drawn, it shall be brought to present arms or present sabers before its commander salutes in the following cases: When the National Anthem is played, or when to the color or to the standard is sounded during ceremonies, or when a person is saluted who is its immediate or higher commander or a general officer, or when the national or regimental color is saluter.
(C.I. D. R. No. I7, Jun. 9, 1917.)
763. At parades and other ceremonies, under arms, the command shall renter the prescribed salute and shall remain in the position of salute while the Natioual Anthem is being played; also at retreat and during ceremonies when to the color is played, if no band is present. If not under arms, the organizatious shall be brought to attention at the first note of the National Anthem, to the color or to the standard, and the salute rentered by the officer or noncommissioned officer in command as prescribed in regulations, as amended herein.
(C'. I. D. R. Үo. 17, Jan. 9, 191\%.)
764. Whenever the National Anthem is played at any place wheu persons belonging to the military service are present, all officers and enlisted men not in formation shall stand at attention facing toward the masic (except at retreat, when they shall face toward the flag). If in uniform, corered or uncorered, or in civilian clothes, uncovered, they shall salute at the first note of the anthem, retaining the position of salute until the last note of the anthem. If not in miform and covered, they shall uncover at the first note of the anthem, holding the headdress opposite the left shoulder and so remain until its close, excent that in inclement weather the headdress may be slightly raised.

The same rules apply when to the color or to the standara is somnded as when the National Anthem is phayed.

When played by an Army band, the National Anthem shall be phayed through without repetition of any part not required to be repeaterl to make it complete.

The same marks of respect prescribed for observance during the playing of the National Antlem of the United States shall be shown toward the national anthem of any other country when played upon official occasions.
(C. I. D. R. No. 1才, Jan. 9, 1917.)
665. Officers and enlisted men passing the uncased color will render honor's as follows: If in uniform, they will salute as required by subparagraph (5), paragraph 759 ; if in rivilian dress and coveret, they will uncover, holding the headdress opposite the left shoulder with the right hand; if uncovered they will salute with the right-ham sahate.
(C. I. D. R. No. Iて, Jtm. 9, 19/น.)
[24802n1, .1. G. O.]
By order of the Secretary of War:
H. L. SCOTT,

Major General. 'Chief of Staff.
Official:
H. P. McCaIN,

The Adjutant heneral.

## INFANTRY DRILL REGULATIONS.

$\left.\begin{array}{c}\text { Changes } \\ \text { No. } 18 .\end{array}\right\}$

WAR DEPARTMENT, Wasmington, February $12,1917$.

Paragraph 58, Infantry Drill Regulatlons (edition approved August 19, 1911, and erlition corrected to November, 1913), is changed to read as follows:
58. 1. Hand, 2. SALUTE.

Raise the right hand smartly till the tip of the forefinger touches the lower part of the headdress or forehead above the right eye, thumb and fingers extended and joined, palm to the left, forearm inclined at about $45^{\circ}$, hand and wrist straight; at the same time look toward the person saluted. (TWO) Drop the arm smartly by the side.

For rules aoverning salutes, see "Honors and Salutes," paragraphs 75s-76. . (C.I. D). R., No. 18, Feb. 12, 191\%.)
[2501746, A. G. O.]
By hiokr of the Serretary of War:
H. L. SCOTT.

Major General, Chief of Staff.
Offictat:
H. P. McCAIN,

The Adjutant General.
$78504^{\circ}-17$

WASEINGTON : GOVERNMENT PBINTING OPEICB: 1917


This book is DUE on the last date stamped below MAR 221918

DEGROTVI951
13 LD Hie
REC 'MuM
6


NOV 71959
OE C rENEWAL RECD LD-URL

JAN 311973 URL JAN 111986 , Renewal FEB 19 igor DISCHARGEURL JUN 1 \& 1586 RECD DD.ORU'
SEP 141978 SEP 061988 NOV 271985 DEC LOURS AUG 81985 UR I $-8$ $1+2$

UC SOUTHERN REGIONAL LIBRARY FACILITY


AA 0012592507



[^0]:    ${ }^{1}$ Ordinarily about 20 yards wide.

[^1]:    ${ }^{1}$ The " pack " includes blanket, poncho, and shelter tent.

[^2]:    1 With a 4 -foot white and red regimental signal flag.

[^3]:    732. If dismounted, the officer receiving the parade, and his staft, stand at parade rest, with arms folded, while the band is
[^4]:    139. Being in line or sklrmish line at halt: 1. With dummy (blank or ball) cartridges, 2. LOAD.

    At the command load each front-rank man or skirmisher faces half right and carries the right foot to the right, about one foot. to such position as will insure the greatest firmness and steadiness of the body; raises or lowers the piece and drops it into the left hand at the halance, left thumb extended along the stock, inuzzle at the height' of the breast. With the right hand he turns and draws the bolt back, takes a cartridge between the thumb and first two fingers and places it in the receiver; places palm of the hand against the back of the bolt handle;

